AMERICAN BEE JOURNAL

Volume 98 1958 Number 9

SEPTEMBER

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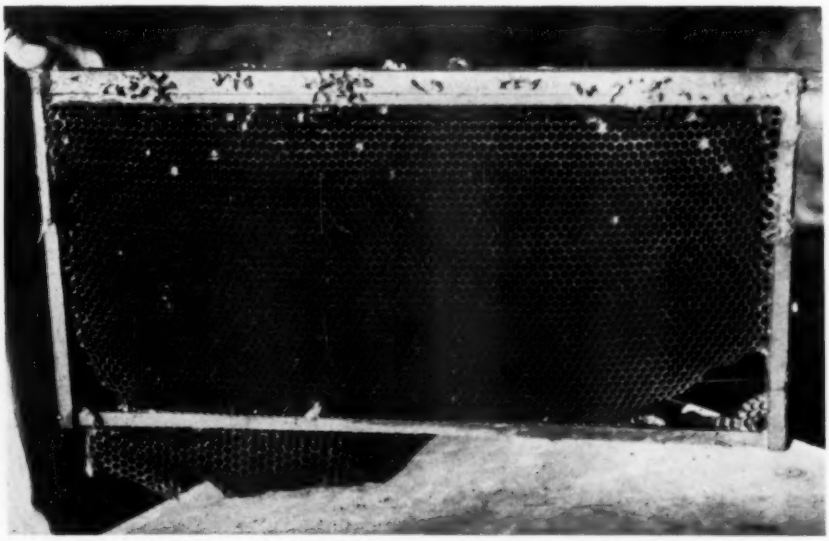

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- Our Cover Picture -

WHO IS IT? — A Contest, *Editor Pat Diehnelt*

W. A. Stephen (1952) with Alan Frost of Australia.

The August Mystery Guest Is W. A. Stephen

Born in Ontario; attended Ontario Agricultural College at Guelph. After graduation he was employed at the Bee Division, Experimental Farm,Ottawa until Dec. 1946; now Extension Beekeeper, North Carolina State College, Agricultural Extension service. While at Ottawa he had leave of absence to study in Germany where he also visited most of the large apicultural research centers in England and on the Continent. He also had time for graduate work at the University of Toronto and the University of Wisconsin. His work at the Experimental Farm was in apiary products. He was responsible for early research in the removal of moisture from honey which proved that it is possible to raise the grade of honey before extracting by forcing heated air of low relative humidity between the combs.

The Mystery Guest for This Month

Short statured, white haired, crew-cut, sharp eyed, go getter. Whether he likes this characterization or not, it's so. He jumped from teaching to department store buyer. Son of a beekeeper and now a commercial honey producer. He lives——STOP! Now it's your job. Send your guess as to who he is and what he has done to "Cover Contest, American Bee Journal, Hamilton, Illinois." For the best answer $5.00 and a three year subscription; second, two years; third, one year. All others four months each. Answers will be published in October as far as room allows.

WINNERS FOR THE JULY COVER CONTEST

No. 1—Gerald C. Sittan Brevard, N. C.

The July Mystery Guest is the "Bard of Reynoldsville, Pa.," George H. Rea. George was the first extension apiarist in the U.S.A. He started in 1916 in North Carolina, using a Model-T Ford over roads made only for wagons. He has worked in many states since but is now retired. During his travels he went into mountain areas where Federal Revenue Agents feared to tread. George could smell American foulbrood farther than most beekeepers can smell hot biscuits and honey. He also had to be a diplomat. He is a noted lecturer and writer and the author of many interesting articles in the beekeeping magazines. In addition he is a gentleman, a scholar and a good judge of sourwood honey and corn likker. We mountaineer beekeepers love him. You all come (George, that is)!

No. 2—W. P. Kinard, Louisville, Miss.

This is George H. Rea, the same genial and affable George in "Who's It?" in February, 1945. He is a pioneer beekeeper continuously interested in advancing the industry; a veteran apiarist who has been instrumental in organizing beekeepers' associations in several states; first in this, then first in that. Sounds like "Let George Do It." In 1905 he helped form the Pennsylvania State Association; then, in 1907, was appointed the state's first inspector. Just before World War I, he was the first permanent extension specialist in beekeeping for the United States Department of Agriculture. Since then he has worked in New York, North Carolina and Tennessee. His activities and appearances as a speaker have taken him into 43 states and into Canada.

He was elected the first secretary of the National Federation (now ABF) but later resigned to devote his time to his extension work and his lectures. He was probably the first radio speaker on beekeeping, making his first broadcast in Pittsburg in 1921. He is the author of several bulletins and numerous articles over the years.

No. 3—Mrs. W. E. Buckner, Thompson's Station, Tenn.

A friend to all and a great promoter in the culture of beekeeping, George H. Rea. As extension specialist, he worked in many states. How well he is remembered in North Carolina and Tennessee where he was located in Nashville. His mission was meeting organized groups, large or small, lending a helping hand to many. Nature has made George Rea a great promoter in a wide field.

No. 4—Raymond Presnell, Banner Elk, N. C.

George Rea was the first extension specialist in the country. In the early years of his career he worked for the A. I. Root Co. In 1916 he drove a Model-T Ford from New York to North Carolina and started the extension program that is still in progress. He dug C. L. Sams out of the heart of the Smoky Mountains in western North Carolina and took him to Raleigh and he served the state for years as our extension beekeeper. Mr. Rea has kept bees in many places and served as extension specialist in North Carolina, Tennessee, Virginia, Pennsylvania and other states. He is a wonderful lecturer and writer. In 1953 he was given a life membership in the North Carolina State Association while at a meeting in Boone. I consider him one of the charter members of beekeeping, an old soldier that never dies and never fades away.

No. 5—D. C. Gilham, Schuykill Haven, Pa.

This is my old friend, George Rea, and I am glad to see his smile on your cover. For many years he was extension apiarist at Penn. State and he was there in 1922 when many beekeepers (including myself) assembled to locate a site for a building in which to teach beekeeping to the students. He was a central figure in all projects for the advancement of the industry. Mr. Rea, myself, and nine others were the first inspectors in the state who served without pay. The report we turned in to Prof. H. A. Surface got the first inspection law passed in 1913. Mr. Rea was honored with gold plaques from the Pa. Association and the N.Y. Association and with certificates of honor from seven other associations. His attendance at meetings all over Pennsylvania and New York were times of pleasure and friendship and inspiration.

No. 6—Barry Thompson, Jackson, Tenn.

This guest is George H. Rea of Reynoldsville, Pa. He has been associated with bees and beekeeping since his start with bees in 1888, He worked in cooperation with many famous beekeepers including P. H. Elwood, E. W. Alexander, and R. F. Holterman. For 18 years he was an inspector. For many years he was with Cornell University. During World War II, George served on the National Resources Planning Board's National Roster of Scientific and Specialized Personnel. He is well known in Tennessee for his help in the resurrection of the failing Tennessee Association. Securing $10,000 from the state, George worked with Commissioner of Agriculture Flanery and State Entomologist Bentley for beekeeping, from April 1, 1944 to April 1, 1945.

Congratulations also to Joseph Samartin, Holmes, Pa.; Edna Sue Brewer, Parsons, Tenn.; and W. G. Duckwall, Jacksonville, Ill.

ADVERTISING INDEX

Aeppler Co., C. W. 374, 380
African Beekeeper 368
American Bee Journal 368, 371, 377, 379
American Rabbit Journal 376
Anderson, Wallace L. 368

Bee World 378
Bessonet Bee Co. 379
Billy Bee Honey Co. 376
Blue Bonnet Apiaries 377
Bordelon, E. J. 376
British Bee Journal 368
Burleson & Son, T. W. 371

Calvert Apiaries 376
Canadian Bee Journal 376
Chrysler & Son, W. A. 379
Cloverline Apiaries 368
Cobana Products 377
Conneaut Can Co. 368
Continental Can Co. 372
Couch, Louis L. 378
Cutts & Sons, J. M. 379

Dadant & Sons, ...Back Cover, Inside .....Front Cover, 371, 377

Esbe Laboratory Sup. 368

Faske, A. W. 378
Flowers Bee Co. 368
Forehand & Sons, W. J. 376

Garon Bee Co. 379

Harper, Carlus T. 376
Homan, Farris 371
Honey Sales Co. 378
Hutchison Mfg. Co. 378

Jackson Apiaries 378
Jensen's Apiaries 379
Johnson Co., Carl E. 368

Kelley Co., Walter T. 375, 377
Koehnen & Sons, C. F. 379

Leahy Mfg. Co. 377
Little's Apiaries 379
Lotz Co., August 346

Marshfield Mfg. Co. 347
Mitchell's Apiaries 368

Petorama 368
Plant, W. E. 377

Reams, W. D. 377
Rives, J. C. 368
Root Co., A. I. ..Inside Back Cover, 368
Rossman Apiaries 347

Scottish Beekeeper 378
Shackelford, John S. 368
Sioux Honey Association 375
Stewart, Frank G. 368
Stoller Honey Farms 376
Stover Apiaries 346
Strachan, Don J. 378
Sunkist Bee Co. 378
Sunrise Apiaries 371

Taylor Apiaries 378
Taylor, Stewart 376

Walker, Eugene 368
Weaver Apiaries 379
Weaver, Howard 371
Wenner, C. G. 377
West, M. C. 378
White Pine Bee Farms 368
Wicht Apiaries 376
Wilbanks Apiaries 376
William Bros. Mfg. Co. 379
Wing & Sons, J. E. 379
Winslett, D. T. 376
Woodland Apiaries 377
Woodman Co., A. G. 375

York Bee Co. .....Inside front cover

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CONTENTS

Our Cover Picture—Who Is It?—Pat Diehnelt 345
The Commercial Beekeeper 348
Queen Mating Nuclei that Can Be Wintered—Edwin J. Anderson 348
Editorial—Pesticides Are Poisoning Us 350
The Buss Report—Honey and Its Competition—John D. Buss 351
Picture Page 353
The Sideline Beekeeper 354
Three Generations—J. W. Shippen 354
Faith, Love and the Bees—Paul L. Hastie 355
A Hive Marking System—Lewis L. Denman 355
Michigan Honey Queen 356
Seasonal Variations—Hilbert Sorensen 357
The Beginner and His Bees—W. W. Clarke, Jr. 358
Education of the Beginner—The Importance of Records—Edward L. Jones 359
Science and Industry 360
Winter Protection of Honey Bees in Kansas—Virgil R. Bayles and Ralph L. Parker 360
Report of the Secretary-Treasurer of the Honey Industry Council—Leslie Little 363
Editorial—Orderly Marketing 363
Meetings, Here and There 364
September—and the Honey Market—Harriet M. Grace 366
All Around the Bee Yard—G. H. Cale, Sr. 367
Undercurrent 369
How to Do It 370
The Scramble—Pat Diehnelt 373
Crop and Market—M. G. Dadant 380

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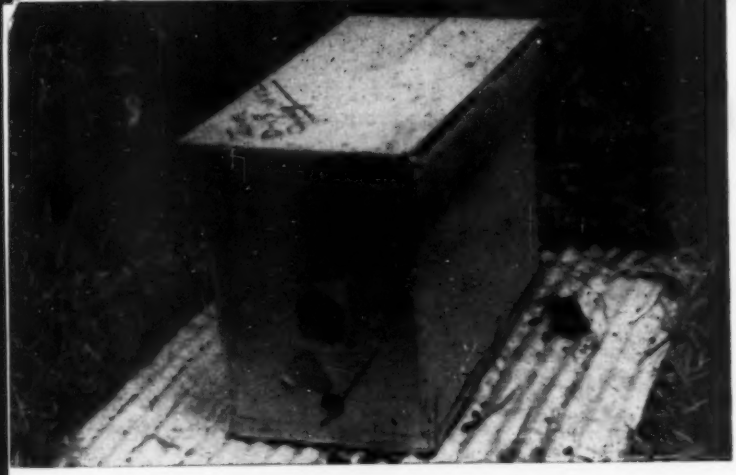


This five comb nucleus transport box has a turned-in screened bottom, double-end screens, turned-in screened top and metal entrance closer. May be used for divides, queen reservoir, or comb carrier. It sets in this picture on a corrugated metal stand also used under colonies in the bee yard.

The Commercial Beekeeper

Queen-Mating Nuclei That Can Be Wintered*

by Edwin J. Anderson

The writer has been working for a number of years to determine the type of queen-mating hive best suited to Pennsylvania conditions. At least four problems relating to these hives confront the beekeeper who tries to rear queens this far north. One problem is the occasional cold spell during the summer months that makes it difficult for small nuclei to maintain the desired 95 degrees F. for the proper development of queens. Cold nights have the same chilling effect upon queen-mating nuclei and their queens. A second problem is that of obtaining bees and brood to start queen-mating units each spring. The normal wintered colonies suffer a considerable loss in strength when bees and brood are taken from them to make up the small units. This loss in strength comes at a bad time when the large colonies are building up for the main honeyflow in June. A third problem is that of maintaining a favorable colony morale in the small units. The fourth problem is that work with the regular honey-producing colonies often interferes with tasks that should be cared for in the queen-mating colonies.

*Authorized for publication on May 21, 1958, as paper No. 2256 in the journal series of the Pennsylvania Agricultural Experiment Station.

At least fifteen sizes and shapes of queen-mating hives were tested. They included some so small they held only one 4 x 5 inch comb honey section. Others were large enough to hold five standard brood frames. Individual units were compared with hives containing as many as six compartments.

The bees in the smaller individual units swarmed more often when the young queen left on their mating flights. The little nuclei in the smaller hives also became discouraged and absconded when not fed often enough or when other conditions were not favorable. Almost continuous feeding was necessary to keep

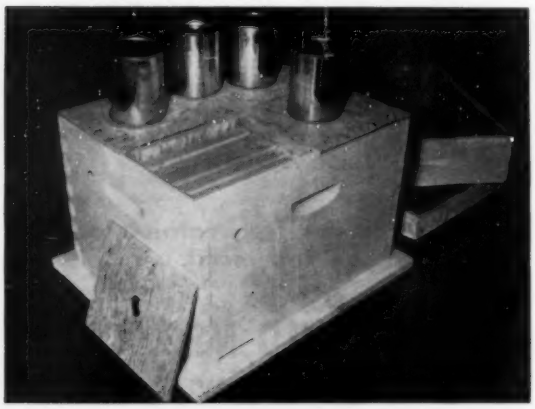


Figure 1. A four-section queen mating hive made from a 10-frame, jumbo-depth hive body.

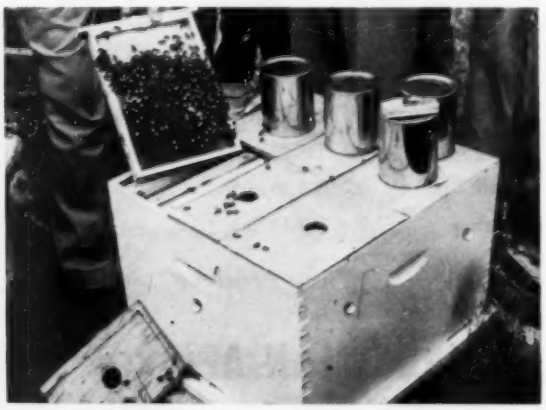


Figure 2. A six-section queen mating hive made from a Modified Dadant hive body.

the bees at home in the smallest boxes containing the one section. Robbing was a serious problem with the smaller individual nuclei.

Many types of multiple-unit hives were tried and all proved to be superior to the individual units for our conditions. The multiple-unit hives for standard sized frames included a ten-frame hive divided into three units, a square hive divided into five units, a special hive made to hold four units with four standard frames in each unit, and others. It was accidentally discovered that nuclei in these multiple-unit hives could be wintered, if relatively strong, and when given the proper care in fall. When colonies in these units became weak during winter, the long frames were not always adapted to survival since the small colonies often had to move from one end of the hive to the opposite end to get to the remaining food supply after consuming the honey where they were located. They had to move from one end of the hive to the other end instead of moving upward where it is warmer, as in a bee tree. It was also observed that the heat of each unit helped to keep the adjoining nuclei warm and in this respect the multiple-unit hives were greatly superior to individual hives exposed to the weather on all four sides. The guards seemed to be able to protect the entrances of these warmer units in a more efficient manner.

The type of queen-mating hive that proved most satisfactory was a jumbo-depth 10-frame or a Modified Dadant 11-frame hive with half length frames. Each hive was divided into 4 or 6 units. The frames in this type hive are deeper and narrower than those in units with standard frames; they are shaped much like the combs in a hollow tree. Queens could be found more quickly on the small frames than on standard sized frames. A special hive made to hold 6 units with 5 half-length, jumbo-depth frames in each unit also worked very well. The protected central units of the six-unit hives built up more rapidly and wintered better than the ones in the outside corners.

Records were taken of colonies that lived and those that died during the winter of 1957-58. Eighty-six nuclei were prepared for winter. Of this number, 22 nuclei died and 64 lived through the winter. The loss was a little less in the four-section than in the six-section hives. The past winter has been severe, as anybody living in the northeast part of the country knows. Eighteen of these nuclei were covered with snow until the first of April when the count of living and dead nuclei was made. The snow caused a slightly heavier loss than in colonies not covered with snow. At this date (in April) weak nuclei can be saved by adding to them about a handful of bees taken from strong normal sized colonies providing the strong colonies are located in a different apiary a few miles distant. The nuclei may also be strengthened with a small quantity of bees taken from a package shipped from the South.

To make a six-unit hive, nail 13/16 inch square strips of wood around all four sides of bottom edge of the super. These strips provide ample space between the bottom board and the bottom of the frames for ventilation. The six entrances are cut into the bottom of these 13/16 inch strips. Each entrance is cut 3½ inches long by 5/16 inch deep. One entrance is cut in the center of each end of the hive and two on each side as far apart as possible to prevent drifting of bees and queens. These shallow entrances keep out the mice during the winter.

The hive body is divided across the middle with a board 13/16 inch thick. The board reaches from the bottom to ⅝ inch from the top. A piece of 24 gauge galvanized angle ⅜ by ⅞ inch is nailed across the center of the top of the board dividing the two halves. It extends ¼ inch above the hive body. The boards for the bottom are cut large enough to extend two inches beyond all sides to make a lighting board for the queens.

Each of the two halves of the hive is divided into three equal sections. The divisions are made with two pieces of ¼ inch weather-resistant plywood nailed together. The plywood is cut just long enough to reach from the bottom to the top of the hive. A piece of galvanized iron 1¼ by 9-9/16 inches is nailed between the top edges of the plywood so it extends ¼ inch above the plywood. This strip of metal is notched at the ends so it fits into the space for the ends of the top bars of frames. The dividing boards are then nailed in place. Each compartment is made bee tight. If the bees can pass back and forth, from one compartment to another, they will kill the queen in one of the units.

A separate inner cover with a 1¼ inch hole bored in the center is made for each compartment. The bees are fed through this opening. A top

Figure 3. A special six-section, five-frame queen mating hive.

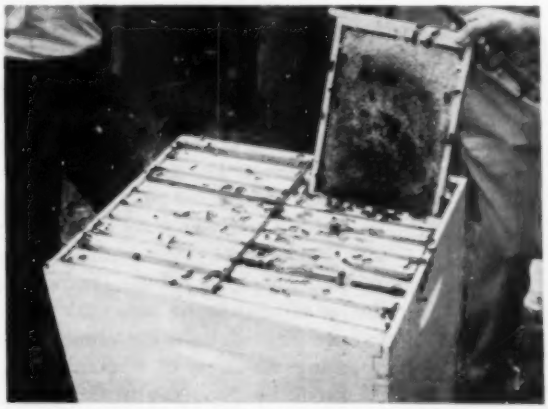


Figure 4. Super of surplus combs of honey taken from queen mating hives and placed on a normal colony.

entrance consisting of a ½ or ⅝ inch auger hole is bored through the front wall of each compartment. It is bored 3 inches from the top and above the bottom entrance of each unit; it provides an escape hole should the bottom entrance become clogged with dead bees during winter.

The hive as a whole is provided with an empty super to hold the feeder cans for the separate units. The cans are the friction top type used in cages for shipping package bees. The cans hold about one quart of sugar syrup. Four or 5 small holes are punched through the lid of the cans for spring or summer feeding and 12 or 15 holes for fall feeding. An extra hole ½ inch in diameter is bored through one of the inner covers. The bees pass through this hole and prevent ant colonies from becoming established in the empty super.

Four-section hives are made in the same way except that each half of the hive is divided into two instead of three sections. Either a ten or an eleven frame Modified Dadant hive body may be used. The bees in the four-section hive winter a little more successfully than in the six-section hives because of their larger size and for this reason are preferred by the writer. One entrance is placed on each side of the hive to prevent drifting. Single unit five-frame hives with the same dimensions on the inside but exposed to the weather on all four sides did not winter successfully.

These queen-mating hives will often produce a surplus of honey during the major honeyflow, especially when queens are not removed from them regularly. Most of the full combs of honey can be removed from time to time so the queens will have plenty of space to lay. The surplus combs of honey on brood are placed in a jumbo-depth super divided in half. This divided super will hold 2 rows or 20 of the special combs. The super is placed on a regular hive and the honey in the frames is used for winter feeding of the nuclei in fall.

Nuclei in the small units must be fed occasionally during that period of summer when there is little or no nectar coming in from the flowers, otherwise many queens will be lost in swarms that fly out when the queen goes on her mating trip. The nuclei must be fairly strong in fall if they are to winter successfully. The weaker nuclei can be united if they are from apiaries at least a few miles apart. Weak nuclei may be strengthened with bees shaken from strong colonies into an empty package cage. The caged bees are fed sugar syrup, then the desired amounts are shaken from the package in front of each nucleus that needs more bees. They are driven inside with a little smoke. These bees also must come from a different apiary to avoid drifting back to their original location. Small nuclei can be wintered successfully only in a well-protected location. Each nucleus must be fed heavy sugar syrup in fall until the combs are well filled with syrup and honey. These small colonies winter better on sugar syrup than on honey, since sugar syrup contains less waste and is less likely to cause the bees to develop dysentery and die. All four (or six) of the units in each hive should contain a colony of bees for winter because each nucleus helps to keep the others warm. If any are missing, the colonies in the adjoining units will be exposed to temperatures about as low as those outside the hive.

The units that winter successfully will be ready to divide in spring. The divisions are used to fill empty units. A little sugar syrup fed early in spring stimulates development of these small colonies. The nuclei that winter successfully can also be used to provide a supply of queens for full sized colonies that have become queenless during winter. These small nuclei build up so rapidly in spring that they often swarm before normal colonies unless they are divided, brood removed, or the queens removed and used for requeening.

EDITORIAL

Pesticides Poison Us

American Mercury, in the July issue, thus titles a long article by William F. Longgood, who says that not even the deadly fallout from H-bombs exceeds the threat to human life as from DDT, clordane, aldrin, dieldrin, heptachlor, lindane, oxychlor, toxaphene and other chemicals. By 1956 the total production of these products reached 506,370,000 pounds. Reckless spraying and dusting not only seriously affects honey bees but its use on food crops endangers public health. According to Dr. Hargraves, blood specialist at the Mayo Clinic, DDT and its solvents cause leukemia, aplastic anemia, jaundice and other blood disorders. Long term build-up in the body may take years to become evident. The poison is stored in body fat and soon the deposite is above the levels considered safe. So the pesticide story goes. William Thompson, of the Thompson Chemical Corporation, St. Louis, warns that the use of nonselective insecticides, that attack friend and foe alike, is upsetting the balance of predator-parasite insects and may allow previously unimportant insects to assume the status of economic pests. It was his decision that his company stop the production and sale of the DDT insecticides which had been a multimillion dollar business for his firm.

HONEY AND ITS COMPETITION IN TODAY'S MARKET

by John D. Buss

THE BUSS REPORT

The Buss Report is a survey of the Honey Industry. The report is written in five parts, which will appear in the forthcoming issues. Part one is an introduction and a background.

John D. Buss is an independent super-market owner, closely affiliated with a progressive chain store operation. For several years he has taken intensive interest in the product, honey. He is thoroughly acquainted with many of the aspects of the honey industry, and has many acquaintances and friends who are associated with beekeeping.

The product honey has a remarkable and romantic history. For centuries honey has been greatly revered for its contribution to the world. Its history is easily traceable back to early Egyptian and Hebrew times. There they considered it to be beneficial for health and longevity of life. Honey is often mentioned in the Bible, and Solomon's advice about it is typical of the regard in which it was held. "My son, eat thou honey, because it is good." And so from the earliest times to the present century honey has been considered a delectable, wholesome energy food.

Through the later years (the last few decades) honey while always enjoying the prestige of being a superb food has been encroached upon in usage by many other products such as preserves, jellies, peanut butter, etc. They have been somewhat more aggressive bringing to the consuming public many flavors, varieties, sizes of merchandise. Their basic thought was to produce more sales, more consumption. The product honey being a perfect food from its origin has not changed over the centuries. For many years the only varieties of honey on the grocers' shelves were the different sizes of jars and comb honey. In rare instances there may have been more than two types of honey. There has been some progress during the past few years in the varieties of honey, such as Honey Cream. The Chain Store Age (a grocery publication) lists 9 types, but only 3 or 4 varieties are commonly displayed on the shelves of super markets today.

The articles of this report are written in five parts and are of necessity rather brief giving only the highlights. Much, much more could be written about each article, however by statistics, quotations, and personal observations I sincerely hope I may bring to your attention the scope of selling honey and the tremendous possibilities accompanying it. It is my sincere belief that using my report as a basic outline for the honey industry, there can be brought about increased consumption, much greater volume sold, and better prices for the producer, something that you have been awaiting for many, many years.

In order to get a proper perspective of the article, imagine yourself as a customer entering a super market, where the super market manager is advertising and merchandising his wares for you to buy.

The modern day super market is a fabulous institution which has been developed to satisfy the customers' wants and needs in a quick orderly manner. The average super market has a variety of over 5000 items, and the average customer remains in the store an average of 25 minutes. Thus the interior of the store is designed to sell the most merchandise in the shortest possible time. Most frequently the preserves, jelly, honey and peanut butter department is found near the entrance of the store.

In this department you will find several nationally advertised brands such as Peter Pan Peanut Butter, Skippy Peanut Butter, Smuckers Preserves, Stokely Preserves, Musselman Jellies, etc. Honey has no brand that we can actually consider nationally advertised or distributed, although there are several large packers of honey. The average number of items in this department in the average super market is slightly over 100 different brands, sizes, flavors, varieties. The super market manager knows from statistics that this department (these 100 items) of his store will account for 1.04% of his entire store sales. Of these 100 items there are on the average 7 items of honey, this is inclusive of brands, sizes, varieties of honey. Thus the honey industry has 7 chances in 100 to have an item of theirs sold from this department. This ratio speaks for itself; it is very low. To visualize the situation in dollars and cents, for every $39.00 worth (approximately) of foodstuffs put on the checkout counters, among these will be a 39c (approximately) item from this whole department (100) items. And to make a recapitulation—in every $39.00 worth of foodstuffs sold there will be on the average (total of) a 39c item in this department and honey has 7 chances in 100 to be this 39c item. At first glance this seems to make the sales position of honey quite remote. Yet as difficult as the role of honey on the super market shelves is, there is a solution.

This report in the five parts will give the logical, positive answer to the procedure of drastically increasing honey sales in super markets and the smaller superettes. This plan will help the small packer just as much as the large packer. Increased sales help everyone from the producer to

the packer. More honey consumed eliminates surpluses bringing higher stable prices. The packer profits too by increased sales, more turnover and volume, and the producer will have a higher priced ready market.

To continue with the report—in order to achieve the results—more honey sold and consumed, many revisions must be made. There must be a revision in the industry starting from packaging the honey itself. New jars, exclusively designed for honey, developed by the glass manufacturers for the honey industry. New labels; colorful, attention-drawing labels. The packing case of honey itself is often very poor, and often packed with the wrong number of jars to the case. Advertising and merchandising which is almost non-existent must be developed so as to be made available to the smallest packers as well as the larger distributors. Also, we must educate everyone interested in sales and merchandising techniques; they are absolutely essential in this modern day world. Every district, state, national beekeepers' meeting should have a sales clinic, courses of instruction. Here lie some of the secrets of increasing consumption, and increasing the actual monetary gain for you. These are but a few of the many changes necessary. More changes will be given all through this report.

Let's assume we are walking down the aisle of a super market and are glancing at the department of preserves, honey, jellies, and peanut butter. Impartially now, which looks the most attractive by outward appearance? Which products stand out? Has your eye appeal made you want to pick it up? Is it honey? No, I'm afraid honey would lose out on this everyday test by a substantial majority. The honey package on most grocers' shelves today will not measure up to its competition. Is this really important? It certainly is.

A leading grocers' trade journal states—packaging is the silent salesman of the food chain store. The container in which the manufacturer packs his product is geared to do a silent job of selling the product to the customer. The same article later states—a package (jar) must be easy to display in the store, no matter how well it protects the contents, if the package won't stand up on the shelf, can't be stacked, it isn't going to sell. Can you stack honey on the shelves easily? No. Competitive merchandise (jellies, preserves and peanut butter) has a screw top lid making stacking easy. On the shelves notice the uniformity, and neatness of the jellies and preserves department. Then look at the honey section in relation to stacking, neatness and eye appeal. Does it compare favorably? No, it does not. This is one of the many factors that is affecting honey today. Your competitive merchandise modernized several years ago and as a result has shown substantial sales increases.

A leading competitor of honey in the jelly and preserve field is planning a national advertising and merchandising campaign this year. Their testing bureaus made their surveys, which were rather startling. They discovered that this department of merchandise was a field of great possibilities. A department that has been neglected not only from consumption standpoint but also from neglecting the potential types of usage. They decided on an active advertising, merchandising campaign.

The survey was as follows (a survey on honey would follow a very close parallel); during the past 10 years population has increased 20%, however jellies and preserves, have had only a gain of 9%. The reason, they discovered, was very little promotion. Manufacturers and distributors have provided retailers with little if any advertising support, and little if any merchandising support.

An interesting point of this last survey is this—this survey made by this aggressive company showed a tremendous opening in this field, a large potential market. This company only started manufacturing jellies and preserves within the past couple of years. Yet, undoubtedly within the next 3 years by their active advertising and merchandising they will have their merchandise on most every super market shelf, and will by a definite majority be the leading jelly, preserve line in this country. One other curious thing will happen. Some of the other brands of jellies and preserves will increase in sales also, by the stimulation of the consumers' desires through advertising and merchandising (by their competitor) of this new brand.

As can readily be observed, the honey industry faces a great task ahead to progress in this ever-increasing competitive field. The future possibilities of honey are tremendous but in order to achieve this result there must be a definite selling program established.

This program must be endorsed by the honey producers and packers. There must be cooperation, leadership, initiative, selling techniques, and merchandising programs to bring about greatly increased sales. By cooperation among producers and packers it will be a very low cost plan. This plan as I will unfold to you is in no way comparative with any plan the honey industry has in operation today or has had in the past. It is a technique with adaptations for the honey industry that has been successful with other products many times before. The immediate results will be so rewarding that the ratio between its low cost and the greatly increased sales will make its great worth quickly recognizable. It is the logical way to sell more honey and be impartial to the small or large producer or packer.

In the future issues of the American Bee Journal I will describe this plan backed by statistics.

Bees Help Create a Marigold

A reader sends a newspaper story about a new marigold in part created with the use of honey bees:

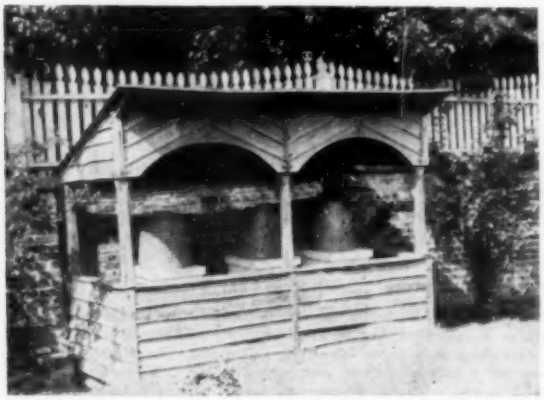
Seldom do seed houses come up with so many outstanding new annual flowers in one year as mark the introductions for 1958.

High on the list is Climax, hybrid giant African marigold, which took 20 years, $50,000, and 600,000 bees to create. This beautiful flower was prized so highly it was given a world premiere in the grand ballroom of the Waldorf-Astoria in New York.

Climax, which comes in bright yellow and deep orange, has almost globular blooms which grow up to five inches across and four inches deep. The blooms are fully double, with slightly ruffled and frilled petals. They grow abundantly on sturdy plants two feet tall and bloom from midsummer to frost.

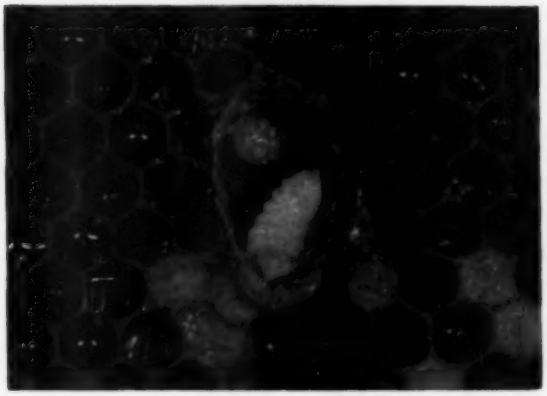
Our Omission — Please Check

As the department heading picture in February on page 54 the two Sisters in charge of the bees at Mt. St. Benedict, Crookston, Minnesota are shown. At the time, the original picture had been mislaid so credit could not be given where it belongs. At the right is Sister M. Alexia and at the left Sister Bertha. Last year with 85 colonies the crop was short, 3490 pounds. They also make beeswax candles.



Straw Skeps at Mount Vernon

Everything has been done to restore the grounds and buildings at George Washington's old home at Mount Vernon, Va. Thousands of visitors go through the grounds each year. The straw skeps appear in the bee shed as of old, but the keeper of the bees has maintained the colonies in regular hives. on which the empty skeps appear. Thus the skep motif is retained while the colonies underneath are operated in a modern way. (Photos by W. A. Stephen, Raleigh, North Carolina)



Emergency Queen Cell

The cell is opened to show its origin from a normal worker cell. Note jelly in the base. Also cell is up on comb surface, not at the edge as true swarm cells are usually placed. Photo by Dr. Colin G. Butler, Rothamsted Experiment Sation, England.

Unusual Queen Rearing

Robert Delperee, Belgium queen rearing expert, uses this permanently packed, multiple hive for raising his queens. The top of the entire set of hives is covered with the lid seen supported like a piano top. (This picture also came from W. A. Stephen, North Carolina)

Honey at Economics Convention

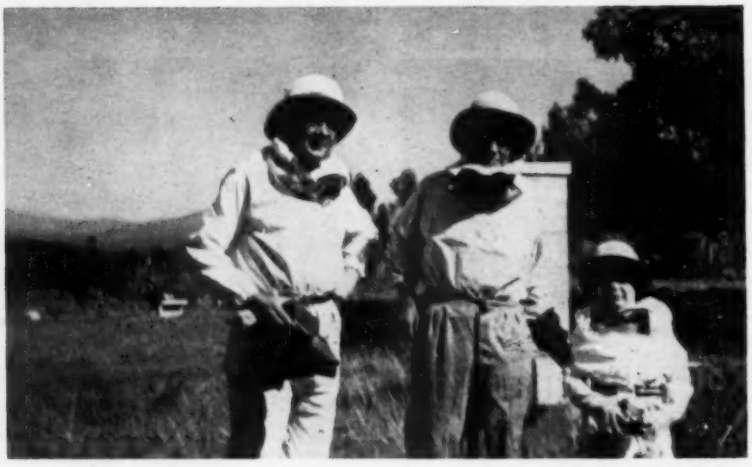
Photograph shows Betty and Leslie Floyd attending the Honey Booth sponsored by the American Beekeeping Federation and National Honey Packers and Dealers Association with American Honey Institute cooperating and Honey Industry Council acting as supervisor and coordinator at the National Home Economics Convention in Philadelphia, Pennsylvania June 24 through June 27, 1958. From Robert Banker, Sec., Federation. Photo by Standard Photo, Philadelphia.

Wire Muff for Queens

When introducing a queen received by mail, it is best to remove the attendant workers that come with her. This can be done, without the queen flying into the blue, in the cab of the truck with windows closed or in a building. But this wire muff is much more convenient. Cut a piece of screen and roll up the size you want. Wire the edges together and attach cloth sleeves at ends. With your hands inside you can do what you want. Take out attendants; mark or clip queen; or change attendants.

The Sideline Beekeeper

One thing about cut comb honey in glass, it is almost a perishable item. It should be sold in a controlled market. The smaller beekeeper who sells cut comb to his own stores is in a position to develop a fine market. Granulation is a bother and it calls for pick-up and reconditioning. Also the fancy pack that sells best demands careful attention to detail to have a container of honey that invites the customer. However, cut comb honey in glass is a fast selling item when rightly handled.



J. W. van der Merwe, J. D. van der Merwe, and J. van der Merwe.

Three Generations

by J. W. Shippen
Chairman, Western Transvaal Beekeepers' Association

Greetings from the Union of South Africa. I thought I would send you this picture of three generations of beekeepers, grandad J. D. van der Merwe in the center, his son Jack on one side and Jack's son Johannes on the other. The youngster is 5½ years old and can handle a colony of cross bees like a veteran. They live in Duiwelskloof in Northern Transvaal. The climate is subtropical and the area is the center of a large forestry industry, mainly Eucalyptus Saligna timber for the Rand Mines. In a good season the honey from these gum trees is heavy. Indigenous bushes of several types also given their quota of honey in season. Then there are large areas of citrus, avocado pears, and Litchis, to mention a few, so the beekeepers are kept busy.

Grandad J. D. is still actively engaged with some 100 colonies, although he runs a trading store and a farm. Jack earns his living mostly from the bees and is always busy with hundreds of standard Langstroth colonies. Johannes often helps but his work is mostly with the hive tool and a pint sized smoker Jack made for him.

Grandad got his wonderlust in 1913 and took a ship to Britain. After some months exploring he took another ship for Canada. Arriving in Quebec he was intrigued with the continuous peal of church bells until he found they were huge locomotives hurtling past him in the main streets. He then took a train journey to Hamilton, Ontario jammed in with hundreds of other emigrants. At the delightful city of Hamilton he visited the Agricultural College at Guelph and ended up at a little farming center named Nell's Corner and fell for the hospitality of the Canadians like a ton of brick. His hosts were Mr. and Mrs. Winbush and their good looking daughter. He went into partnership with Mr. Winbush on a small farm near Dunville and was soon the owner of a fair sized apiary.

After the Union of South Africa the winters in Canada were a nightmare for a beekeeper. Hives were placed in fours with the entrances

four ways and then a large case built around them. Dry leaves were used as insulating material.

He finally married the beautiful Miss Winbush. Then the ugliest baby in the American continent was born. They named him Jack and because of of the fact that he was badly stung one day when he was in the toddling stage they changed it to "Jack the Bee-eater."

From Canada the family moved to Los Angeles; then another move to Monrovia in northern California where Grandad established another bee outfit. He also gave lectures and demonstrations at Stanford College, Palo Alto, and his advice was even sought by the head gardener for President Hoover. In 1933, South Africa began to call him back and so the family landed in Duiwelskloff to remain for good.

Jack started into commercial beekeeping as a young fellow in 1934 and today, at 38, he is one of our top apiarists in the Union of South Africa. He is also prominent on the panel of Honey Judges run by our parent association, the South African Association of Beekeepers. The youngster bids fair to become the third generation to carry on the Van der Merwe beekeeping interests.

Grandad was among the first full professional beekeepers in our country and is an authority. He has for years contributed numerous articles to the S. A. Bee Journal, our bimonthly publication.

So here we have three worthy generations of beekeepers. The elder two are respected and loved throughout our land for their profound knowledge of the craft and their pure love of the bees themselves and the youngster will one day take over a legacy of which I am sure he will be a proud successor.

Faith, Love and The Bees

by Paul L. Hastie

It is Sunday as I write these lines. The weather has been rainy; glum and cold to most folks. Yet I notice the dandelion in the lawn, the wild peppermint, the hollyhocks and other flowers in their beauty. The sun is trying to come out and it leads me to see the glories of nature as I imagine it must look to the honey bee as it searches for nectar.

It is only recently that I have been able once more to be privileged to work with the bees because, for over a year, I was in a hospital with lupis ermathintios a rare and incurable malady according to the medical world. I was given three months to live as fever of 106 to 108 caused me to lose from one to two pounds a day and got me to a place where I could not even digest milk.

Why am I alive today when the doctors said all they could do was to slow down the thing that would eventually bring death? I feel three things are the answer: 1. Faith in God; 2. Love of my family; 3. A strong desire to work once more with my friends, the bees.

Faith everyone should have as it gives us hope and standards to live by to strive to be alive. As I work in the bee yard my faith is strengthened as I see the flowers, the trees, the green grass and the bees at their work and what they accomplish; their useful and unselfish manner as they toil for one end, the preservation of the colony.

If the bees are cared for I know that I will be. Love and fellowship is something that makes us want to live. We receive love from our family and we get fellowship even in our work, as it is much more pleasant and time passes more quickly if we super the hives, hunt for queens, or extract the honey with another who is interested in the same occupation.

Many have asked me, "Why do you work with bees? That is the last thing I'd ever do." They have not come to know the bees as I have; to understand their needs, the methods they use to work for them. I have come to feel more at home with the bees than with most people.

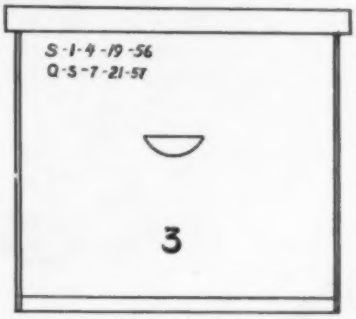
In the hospital, as I felt the prick of the needle, my mind would suggest how nice it would be to feel the joy of a bee sting once more. In fever my mind would recall the heat of the sun in July and August as we took off the honey and long for it again. When I could not eat I would remember the taste of honey in new comb.

The things in life that really count we do not appreciate until they are taken away. Now as I work with bees it will be with a new attitude of thankfulness, joy and happiness with my friends, the bees.

Perry, Iowa

A Hive Marketing System

by Lewis Denman



SOURCE	BREED
S—Swarm	I—Italians
P—Package	C—Caucasians
N—Nuclei	S—Starlines
C—Colony	CN—Carniolans
	B—Black

With a crayon, pencil number each hive when set up 1,2,3, and so on. The numbers should be on the back or sides whichever is in the direction of your usual approach, and about 2 inches high. Then, in the upper left corner, with letters about ¾ inch high, record the source, type, and date of installation. For example: S-I-4-19-56. The "S" means that the source of the bees was from a swarm; "I" for Italians and 4-19-56 being the installing date. If the source was from a package then the "S" would be "P." If the type was Caucasian then "I" would be "C," reading thus: P-C-4-19-56.

If and when you requeen to build up or change breeds, add a line below the first. For example: Q-S-7-21-57, "Q" meaning queen, "S" meaning Starline, and 7-21-57 being the date of introduction. If you requeen again you may either leave your recorded information for colony "History," and add a queen line below, or erase and reprint portions of the queen line to correspond with the new queen introduction.

Crayon marks can be removed with a small cloth dipped in kerosene, gasoline, or any cleaning solvent, or scraped off with a knife or with a hive tool. When bees are transferred into a new hive body, the markings can be recorded quickly on the new hive if your crayon pencil is kept handy in your tool box.

Texas

Michigan Honey Queen 1958

Miss Kay Seidelman, Route 3, Ionia, Michigan, daughter of Mr. and Mrs. George Seidelman, was elected Michigan Honey Queen at the annual meeting of the Michigan Beekeepers Association on July 19, 1958 at Ionia. Kay is 17 years old, blonde hair, blue eyes and 5 feet, 4 inches tall. She appeared in the Ionia Free Fair parade on Monday August 4, riding in a convertible with Congressman Alvin M. Bentley. On August 6th she will be crowned by the Governor G. Mennen Williams in front of the grandstand at the Ionia Free Fair. She will be appearing in various events throughout the state and will enter the Queens Contest at the Michigan State Fair in Detroit on Wednesday September 3.

Kay's first appearance as the Michigan Honey Queen was at the Lowell Showboat on Friday July 25. She appeared with Miss Michigan for 1959 and the Gratiot County Bean Queen.

If there is a National Honey Queen Contest this year, Michigan feels they have a fine candidate to send.

Kay was chosen from a field of three contestants by popular vote of the Michigan Beekeepers Association. The other contestants were also daughters of beekeepers, this being one of the requirements for running; they were, Miss Jeanne Hurshka, daughter of Mr. and Mrs. Frank Hrushka, Boyne Falls, Michigan and Miss Joyce Marr, daughter of Mr. and Mrs. Lawrence Marr, Addison, Michigan. The girls were interviewed by Mr. Richard Hubbard, Onsted who asked them each the same questions. We had three beautiful, talented and ambitious girls any one of them would have made a lovely queen, and Queen Kay feels highly honored to have been chosen.

Michigan has had a honey queen since the year 1951 with the exception of last year. The Seidelman's are proud that the first queen was their daughter. Queen Barbara who was the 1951 queen. In the year 1957 when we didn't have a queen as such we had a Mrs. Honey Queen and Mr. Lazy Drone as our representatives and Mr. and Mrs. George Seidelman were honored by being so named.

Our Mr. Lazy Drone and Mrs. Queen Bee for 1958 are Mr. and Mrs. Floyd Hatch of Copemish, Michigan. This couple was chosen as representative of beekeepers and their wives of Michigan and this is an honorary title. Mr. Lazy Drone is not the laziest beekeeper, but maybe one who deserves to be for a year.

The summer meeting was very well attended and a fine day of fun and learning was experienced by those participating. James Seidelman, 14 year old son of Mr. and Mrs. George Seidelman won the smoker contest and Prof. Bert Martin walked off with the prize for telling the 'tallest story'.

Another "Lost" Doner

In July, page 278, the picture for the Beginner department shows a group of beekeepers over a colony. But who sent it, we asked? Rev. DeForest Tennies, Cranesville, Pa., clears up the mystery. He writes: "This picture was on the front cover of the Pennsylvania Beekeeper for December 1956. Jess Sterling, who for several years inspected the bees of Crawford County, was sick and not able to make spring inspections. The members of the North West Tri-County area held a meeting at this place inspected bees and put on supers for him. Mr. Barton is clipping the queen. This is one of several pictures taken at that meeting. Several groups were working on the bees and a lot of work was done in a short time."

Seasonal Variations

by Hilbert Sorensen

Honey crops from year to year are variable and unpredictable and no one can foretell what sort of crop well be harvested. Perhaps that is what adds suspense and interest to the business of producing honey.

In this northeastern part of Wisconsin we look for two flows during the summer. The first from the middle of June to the third week in July, from white Dutch, Ladino, alsike, sweet clover and perhaps alfalfa. In a favorable year a record crop from alfalfa and red clover comes about August first, we may then have a second flow, depending on the season with honey also from wild flowers, with buckwheat perhaps contributing.

In 1951 the flow began June 15-20 and strong colonies had a good supply of honey by July 20th, all white and fine grade. I had a few weak colonies and some swarms I had caught, expecting them to be ready for the second flow the last of July and in August. But this fall flow did not come. I moved two colonies beside a patch of buckwheat at the request of a friend and each week I would look at them expecting full supers. But there was no fall flow, not even from this buckwheat.

Then came 1952. By May first some colonies were quite strong so I divided some of them which is all right if done early enough. For an early flow one has to take a chance. The flow began about the middle of June and continued right through July and into August with no let up. A peculiar character of the flow was that after the middle of July the honey was dark and strong flavored, presumably from wild flowers, and the divides, as well as the other colonies, produced a good crop of this late honey.

1953 was again entirely different. The flow began about the second or third week in June. I expected a normal flow. The first of July was quite dry, with little rain for three or four weeks. The bees gathered a fair crop but not up to some previous years. There was very little swarming. By July 10th all clover became hay. There was nothing more for the bees. By July 15th the deputy inspector was at my place and said that the general opinion was that there would be about a fourth or half of a crop.

By July 15th there had been no rain for several weeks. Then we got good rains for several days, soaking the ground thoroughly. The second crop of alfalfa bloomed so the fields were blue with flowers and, this developed into one of the heavist flows I have ever seen. The bees demanded supers and more supers and I had to extract and return supers.

When I began to extract I expected dark honey but it was clear and white. At the State Fair it was identified as "pure alfalfa."

Then came 1954. The bees were building up well as usual but by the 10th or 15th of June, when the flow should begin, a cool rainy spell set in lasting into July. The weather was rainy all summer. There was a good growth of vegetation but little honey was stored so the season ended with the smallest crop I have had in all the years I have been keeping bees. It seems to me that a season with more than normal rainfall is not productive of a good honey crop. Of course, in such a year, there is much less work in caring for the bees and the honey and there is less expense for supplies. But there is also less profit.

During 1955 I met with more of a surprise than in any previous season. Due to the small crop the year before, some colonies went into winter low in stores. When spring came they were near starving. Those that needed help the most were fed dry sugar on the inner covers. April 29th all colonies were low in stores. Nearly all combs were empty and a few colonies were living entirely on sugar. Then dandelion began to bloom and I figured now the bees could get along so I did not pay much attention to them until about May 18th when I was surprised to find practically every hive filled with brood and honey, dandelion honey clear and yellow with dandelion's bitter after taste.

Never had the bees so urgently needed supering so early. The heavy flow caused the queens to lay profusely thus producing an abundance of brood. This caused a heavy build-up in population. All of this prepared the way for a season of such swarming as I had never experienced before.

I have read considerable about ways to prevent swarming but I do not think any preventive measures would have stopped the swarming that year. It seemed as though the only thing to do was to watch them closely and retrieve the swarms. Most of the swarms were unusually large. There were many afterswarms. To prevent getting too many colonies many methods were used. Sometimes the old colony was moved to one side and the new swarm set in its place. Some were set aside as new colonies. Some were united. The thirteen colonies in spring became 22.

Now for the season's flow, due to the wet year previous, there was an unusual stand of clovers. I had never before seen white Dutch so abundant. The entire summer was dry yet a good flow developed. I used up my supers and had to buy frames and foundation for empty shells. I put on supers as fast as I could. I extracted supers two, three and even four times. Even the swarms produced well. The bees ended the season with an average of 200 pounds to the colony. I believe bees produce more by taking the filled supers off, extracting them and giving them back the empties for refilling than they will if the supers are stacked six to eight high and all removed at once at the end of the season.

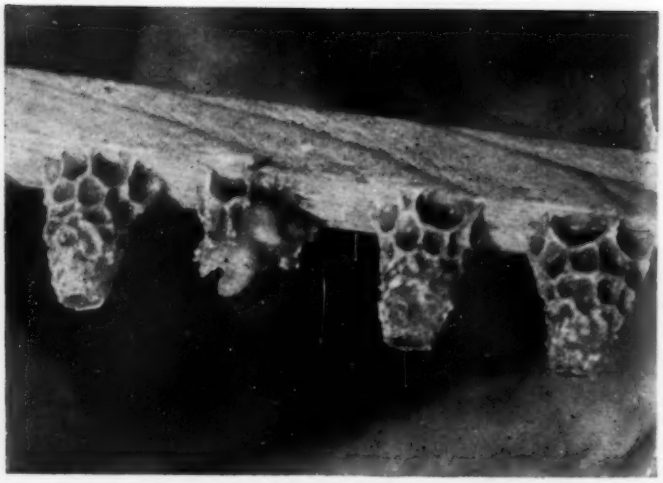
Wisconsin

Creative Advertising

An advertisement from the Chicago Tribune, 9 by 14 inches, advertising Nabisco Honey Grahams shows a cartoon figure getting honey from a skep into a pail; another harvesting wheat; a hungry boy eating grahams and copy about "real country honey and real graham flour—crisp, tender, golden brown." This meets with my idea of how honey should be promoted. In my work in creating advertising displays that will sell merchandise (Display Engineers Inc., Chicago) new ideas must be brought up constantly. One of the principals of advertising is to create a desire in the buying public. Honey as such won't create that appeal but, combined with something in a different form, there is a great demand for it. With all the work and investment in beekeeping the beekeeper is working for low wages at present honey prices. Honey, promoted properly, should sell for 40-50 cents a pound.

Lawrence Juhnke

Chicago, Illinois



These queen cells are attached along a cell bar used in commercial queen rearing. They show white wax used in their structure and also some of the wax is fashioned something like worker cells. Odd how the bees carry this cell-making behavior over to the queen cells. They do the same thing when they build burr comb or put wax on the wood parts of the hive. Notice that one of the cells has been opened to show the queen larva and its bed of royal jelly.

The Beginner and His Bees

Edited by

W. W. CLARKE, Jr.

**Question from*
W. W. Eusminger
Columbus, Georgia

► Please give me a method for the production of royal jelly. I have wax cells, wooden cups and an eye dropper.

Answer: I doubt if the question of producing royal jelly comes within the scope of the "Beginner and His Bees," but we will try to give you an answer.

In rearing queens commercially by using wax cells and wooden cups that you already have, a one to two day old larva is transferred to the wax cup with a grafting tool and placed either in a queenless colony called a swarm box, or in an especially prepared queen-right colony which has a hive body containing young brood, bees, and food, above a super or two and a queen excluder. Place the grafted cells in the center of this hive body between the two frames of young brood. The accepted cells will be built into queen cells in about 24 hours. After three days, the cells are taken from the colony and the larvae removed from on top of the royal jelly. The royal jelly is removed with a small spoon or the eye dropper.

In grafting, you may graft into the dry cell cup, but many producers prefer to add just a drop of royal jelly which has been diluted with a small amount of distilled water.

It is important to use young larvae and a strong cell-building colony.

I believe, commercially, the royal jelly is removed with a small suction pump similar to the one used by a dentist.

I imagine you know the cells are placed in the wooden cups to make it easier to attach the cell to the bar across the frame; from 14 to 20 cells make up a bar. A new bar may be added in a day or two but be sure the cell-building colony is kept strong by adding new brood and that they are well fed.

I would recommend that you obtain further details by purchasing a good book on queen rearing, such as the one written by Eckert and Laidlaw. The procedure for producing royal jelly is about the same. Royal jelly must be refrigerated to preserve its quality.

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**Question from*
Orval Kester,
Stratford, Conn.

► What kind of a permit is necessary so one can move bees from one state to another?

Answer: A permit to move bees between states and sometimes within the state depends almostly entirely on the states involved. Almost all of them have difficult requirements; some do not permit bees to move into the state on combs. In most cases a permit, or inspection certificate is necessary. These permits, or certificates, or at least the requirements for moving bees can be obtained from the State Bee Inspector, who is usually located in the State Capitol, Department of Agriculture. Your own state entomologist can probably tell you whom to contact.

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**Question from*
George A. Archambo
Phoenix, New York

► Can you tell me about the queen and drone trap used at the entrance of the hive? I lose so many field workers that get trapped in the upper compartment. Do you know of a trap where this won't happen? I have only been keeping bees for about six years. I have one colony with two queens and have a terrible lot of brood in it. I would surely be sick if they were to swarm. Here we only have about one good year in every four.

Answer: I am surprised to hear you are using a queen and drone trap. I think your bees will do a much better job for you if you eliminate it entirely.

The ways to get rid of drones are to use good foundation so that the bees build good comb; cull your combs regularly to eliminate any with large areas of drone cells; and head the colony with a good young queen which will lay as few drone eggs as possible.

If you are using the trap as a swarm preventive, I think there are better ways, such as giving the bees more space for brood rearing and

storage of honey, have a good queen, and give additional ventilation, do not use queen excluders too early and wait until two or three weeks before the end of flow, then check the colony regularly (every eight days) during the swarming season to eliminate swarm cells.

I doubt that you can find any trap which will do the job without the drawback you mentioned.

Some beekeepers use a two-queen system to build strong colonies, but it is probably wise to take out the older queen at the start of the honeyflow. It seems to me that with good management you should have a better average than one year in four.

Education of The Beginner

The Importance of Records

by Edward L. Jones

Much of the available beekeeping literature today only serves to confuse the beginner with contradictions and techniques, which while applicable to one locality, are wholly unsuited to the majority. It seems the more one reads, the more the confusion. One expert may say, "Every effort must be made to build the colony to great strength for the honeyflow." Another says, "Very strong colonies should be divided or some of their bees shaken before weak hives before the honeyflow." Many authors use terms definable only to themselves, such as: "strong colonies," "sufficient stores," etc., or refer to dates in which, unless he is very familiar with the locality, the reader doesn't know whether they refer to spring build-up, swarming time, dearth or full nectarflow, etc. To be exact in articles on a particular beeman's timing in his operations, data should be presented on the rainfall, climate, flora and the duration of blooming periods, and time and rate of nectarflow, etc. The recitation of all this data for some particular author's method in overcoming a difficulty would make such reading exceedingly tedious, yet I believe bringing out some of the background would make the article more understandable, interesting, and be of great help in adapting the technique to one's own operation.

How strong is a strong colony? How does it look when opened up? One cannot count the bees. A standard reference says the colony should cover 10 to 20 frames at first nectarflow,—now we're getting somewhere. An association guarantees 800 square inches of brood for each hive rented for pollination purposes. Here again is meat for comparison. What is a productive queen? How fast should a normal colony be build up at any stage of the spring build-up? Many lessons must be left to one's own observations and experience.

Not having an experienced beeman to tell me what was going on, and being an engineer by profession, I felt a need for some exact standards from which I could learn more about these fascinating insects. The keeping of records was essential:—rainfall, temperature, blooming periods of the plants that the bees visited, etc.

Rainfall data was easy to obtain, but my notes on how much and when it must fall for optimum results on the honeyflow only date from a few years back. The same applies to temperature, which was the mean average deviation from normal obtained from the daily paper of a city 120 miles away. I learned about many plants and recorded blooming periods of all plants I found the bees visiting. It was found that variations in average temperatures and in rainfall for a month could advance or retard the blooming period of some essential plant as much as two or three weeks.

Now to evaluate the strength of a colony, build-up, etc. A count of the frames containing brood is not reliable, as the amount of brood on each frame could vary from a few cells to a full frame. Square inches of brood is good. I don't know the method it is obtained by those who refer to it, but it could be quite a job. Here is the method I use:

Starting with the first pollen bloom in the spring, I go through each hive and, of each frame containing brood, I estimate the fraction of each side that contains brood or eggs. Thus, a frame might be half filled on one side and three-quarters filled on the other.

$$\frac{\frac{1}{2}+\frac{3}{4}}{2} = \frac{5}{8} \text{ frame of brood.}$$

Adding all the frames gives the total full frames of brood. With a little practice, this can be done mentally as I go through the hive, and the total recorded.

This can lead to higher fractions, but do the best you can on successive weeks and you will be surprised at the uniform rate at which the brood increases. When the number of frames of brood fails to increase over a three-week period, the queen has probably reached her laying peak.

Let us say a hive is examined and three frames of worker brood found. Of course, some brood will begin emerging immediately, but in three weeks all will have emerged. At this time an examination finds four frames of brood. In three weeks this brood will also have emerged. Taking the average life of a worker at the busy season as six weeks, we can assume the workers living at the time of the first examination are all dead, and the population of the colony consists of the hatched brood of the two examinations or seven frames. Now, a standard frame contains approximately:

$2 \times 8 \times 16.75 \times 27 = 7{,}236$ worker cells.

Therefore, seven frames would give a population of 50,652 bees. With weekly examinations and brood frame counts the beginner can now determine how strong the colony was at any time and later can look at a hive and judge its relative strength at any time because he has had this exact comparison. Also, he knows conditions of build-up and strength of colonies which later made fine production records. This procedure requires frequent examinations and is time-consuming, but, once the lessons are learned, it is no longer needed. However, there is one feature which even the large-scale beekeeper would find worthwhile in applying it to a representative few colonies in his apiary. These hives are examined periodically and the average brood strength plotted on a graph against the date. The curve during spring build-up may be compared to any previous year and at any date gives the exact number of days the apiary is ahead of or behind the previous year at a given colony strength.

Arizona

SCIENCE EDITOR
DR. WALTER ROTHENBUHLER
Iowa State College,
Ames, Iowa

INDUSTRY EDITOR
ROBERT BANKER
Cannon Falls, Minnesota

Winter Protection of Honeybee Colonies in Kansas[1]

Virgil R. Bayles[2] and Ralph L. Parker[3]
Kansas State College, Manhattan

Success in the management of honeybee colonies from the end of the last nectarflow in the season to the beginning of the next major nectarflow of the following season includes three factors: stores of high quality, protection from the wind and cold, and room for the rearing of brood at the appropriate time, say Phillips and Demuth (1918). These authors advocate windbreaks or insulation to deflect or break the course of cold winds from the hives and thus reduce colony heat loss. Use of supplemental insulation requires additional expense, summer storage to protect the equipment from mechanical and water damage, and labor twice a year for installing and storage movement. An alternative (Parker 1958) is to produce colonies in the fall with large worker populations and an adequate amount of stores consisting of 60 to 70 pounds of honey and 600 square inches of pollen reserves, sufficient to last from about October or November 1 to about the following May 1.

Good colony management for honey production provides a large working force of field bees available at the beginning of the first major nectarflow.

Farrar (1943) showed that during a protracted cold period the temperature of the air surrounding the colony cluster approached the outside temperature regardless of the degree of insulation of the hive. He also showed that the winter cluster provides its own insulation against heat loss. Farrar (1952) stated that for winter insulation to be protective, it would have to be around the cluster rather than around the hive.

Taylor (1949) stated that Langstroth did not believe in packing bees, but did advocate protection from the wind. Cale (1934 and 1935), Brown (1943), and Langley (1945) stated that beekeepers in northern regions of the United States reduced the amount of insulation given to hives during the winter to a tar-paper wrap or located the apiary with windbreak protection. Barnes (1952) stated that a good windbreak against the prevailing winter winds should be provided and that the apiary location, if possible, should have good air drainage.

METHODS

The apiary location at the Kansas Agricultural Experiment Station, Manhattan, is surrounded by windbreaks on three sides. The north and west windbreaks have two rows of evergreen trees. On the south is a row of Chinese elm trees.

The colonies during 1953-1954 were in two-story 10-frame hives while during 1954-1955 and 1955-1956 they were in one-story Dadant hives. Each treatment consisted of two adjacent colonies. Treatments consisted of colonies (1) wrapped in tar paper; (2) covered with a two-layered celotex overcoat type of packing case; (3) on summer stands with no additional covering but located within the apiary; (4) south side of the two rows of evergreens; and (5) north exposure, in the open, north of windbreak. Different paired colonies were used each year. Each of the colonies the last two years were wintered in a one-story Dadant brood chamber.

By October 15, the second hive body in the two-story Langstroth hives was full of honey with 10 to 20

Colonies protected by one layer of tar paper which, in Kansas, seems to be the best for economical wintering.

[1]Contribution No. 711, Department of Entomology, Kansas Agricultural Experiment Station, Manhattan.
[2]Former graduate student.
[3]Entomologist and Apiculturist.

pounds in the lower body. To supply the Dadant colonies with adequate winter stores, two or more full brood combs of honey were inserted on each side of the brood just as brood rearing was ceasing.

In 1954 the only sealed brood count (estimate) in square inches was made on April 19. Such counts in the Dadant hives were begun the first week in April in 1955 and the third week in April in 1956. The counts were made every twelve days through the third week in July of each year, totaling ten in 1955 and nine in 1956. The honey was extracted on July 23, 1955 and July 25, 1956. It was from yellow and white sweet clovers. The average bee potential was estimated by multiplying each square inch by 26.

RESULTS

Hive weights in the fall and spring in 1953-1954 are shown in Table 1. The loss in weight during the winter was the result of stores consumed and dead bees. The colonies covered with tar paper had the least average loss (6 lbs.) while the colonies with the two-layer overcoat case had the greatest average loss (30 lbs.). The colonies with north exposure (north of the windbreak) and those with windbreak protection had about the same amount of loss. The overcoat type case apparently keeps the colonies too cold in the spring and during warmer periods in winter because of the insulation which retards the temperature change within the hive, delaying brood rearing in the early spring resulting in a weak colony not able to take full advantage of the first major nectarflow or the collection of large quantities of pollen in the spring. Tar-paper wrap is thin and permits a more rapid change of temperature in the hive, and since it is black in color, absorbs the heat from the sun and thus raises the temperature within the hive, resulting in opportunities for cleansing flights during favorable weather in the winter and the initiation of brood rearing earlier in spring.

Table 2 shows that colonies with north exposure (562 sq. in. of brood) or with windbreak (565 sq. in. of brood) protection had the greatest average number of square inches of estimated sealed brood in the spring followed by colonies with the tar-paper covering (435 sq. in. of brood). Those with the two-layer overcoat case had the least (279 sq. in. of brood) which indicated that too much protection is detrimental to early brood rearing.

The average peak of brood rearing in 1955 for all of the colonies occurred between May 20 and June 13 while in 1956 it ranged between May 2 and 14. This latter case is good management timing in relation to the nectarflow. The nectarflow in 1955 began on May 27 and in 1956 on May 29.

Table 3 indicates that by the third week in July the different treatments all averaged more than 100,000 potential bees per colony each year except the two colonies with north exposure and summer stands in 1955, and the two colonies on summer stands in 1956. One each of the colonies in the northern exposure and on the summer stands had to be requeened twice between April 15 and May 9, 1955. The queen loss was caused probably by the disturbance of shaking the bees from the combs during the measurement procedure. One of the queens in one of the colonies of the windbreak treatment in 1955 was lost and the colony was requeened on July 8. In 1956 colony 17 in the summer stands treatment was requeened April 20 and the other one May 26 and June 7.

Table 1. Two-story standard colony weights in pounds before and after wintering.

Treatment	Weight Oct. 28, 1953	Weight Apr. 19, 1954	Reduction in weight	Average reduction in weight
Tar paper	137	130	7	
Tar paper	130	125	5	6
North exposure	138	113	25	
North exposure	119	103	16	21
Windbreak	136	112	24	
Windbreak	136	116	20	22
Two-layer overcoat case	152	122	30	
Two-layer overcoat case	154	124	30	30

Table 2. Estimated square inches of sealed brood in two-story standard hives following overwintering.

Treatment	Apr. 19, 1954	Average	Percent of sealed brood	Average potential bees	No.
Tar paper	534				
Tar paper	336	435	24	11,310	
North exposure	599				
North exposure	526	562	30	14,612	
Windbreak	512				
Windbreak	619	565	31	14,690	
Two-layer overcoat case	402				
Two-layer overcoat case	155	279	15	7,254	

Table 3. Summary of estimated percent of all potential bees produced during the spring period, April 3 through July 25, 1955 and 1956, based upon total potential bees produced by all the various treatments.

Treatment	*Number of potential bees in thousands* 1955	1956	Average	Percent of all bees produced
Tar paper	112	118	115	22
North exposure	99*	108	103	19
Summer stands	109**	81***	95	18
Windbreak	111	104	107	20
Two-layer overcoat case	119	102	111	21

*One colony requeened April 15 and May 9.
**One colony requeened April 26 and May 9.
***One colony requeened April 20; the other requeened May 26 and June 7.

Table 4. Summary of percent of sweet clover honey produced during 1955 and 1956, based upon honey produced by all the various treatments.

Treatment	Average July 23 1955	% of honey produced	Average July 25 1956	% of honey produced	1955 and 1956	% of all honey produced
Tar paper	61	22	76	22	137	22
North exposure	44	16	73	21	117	19
Summer stands	38	14	64	18	103	16
Windbreak	61	22	64	18	125	20
Two-layer overcoat case	71	26	74	21	145	23

Summarizing the estimated percent of all potential bees produced during the spring period of the two years (Table 3), based upon total bees produced by all the various treatments, the tar paper was highest with 22, followed by two-layer overcoat case, 21; windbreak, 20; north exposure, 19; and summer stands, 18. The queenless condition of the colonies in the latter two treatments probably had some influence on the number of potential bees in each case as well as the honey production.

Honey production is presented in Table 4. Only honey produced from yellow and white sweet clovers during 1955 and 1956 was recorded since the effects of wintering on colonies, as a general rule, would be adjusted by the time of the alfalfa, a mid-summer nectarflow.

The average percentage of honey produced by all 10 colonies (Table 4) during 1955 was highest with the overcoat case with 26, followed by tar paper, 22; windbreak, 22; north exposure, 16; and summer stands, 14. During 1956 the tar-paper-wrapped colonies were highest with 22, followed by overcoat case 21; north exposure, 21; summer stands, 18; and windbreak, 18. For the two years the overcoat case averaged the highest percent of honey with 23, followed by tar-paper wrapped, 22; windbreak, 20; north exposure, 19; and summer stands, 16.

SUMMARY AND CONCLUSIONS

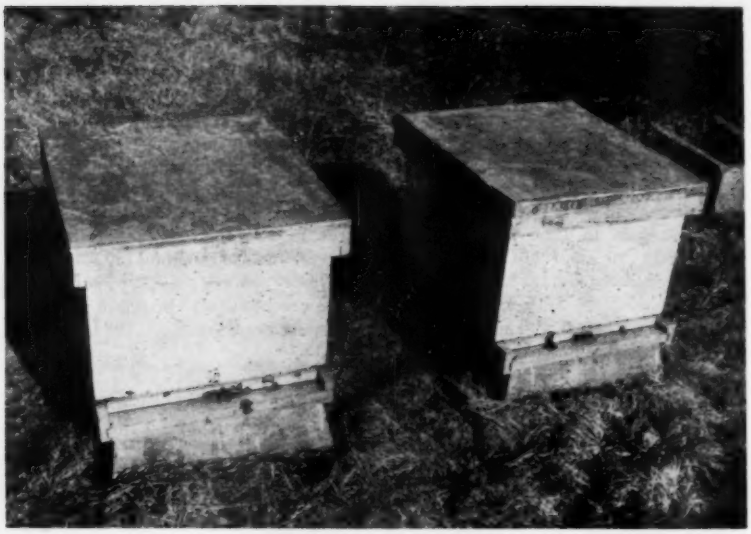
Colonies protected by tar paper during 1953-1954 lost less weight, i.e., consumed the least stores and lost the least bees, during the winter, and colonies in the two-layer overcoat case lost the most weight. Colonies with north exposure and those with a windbreak protection lost about the same amount of weight and ranked intermediate between the two-layer overcoat case and the tar-paper-protected hives.

The average number of square inches of all sealed brood (estimated) in 1953-1954 was greatest in the colonies with north exposure and with windbreak, and least in the colonies with the overcoat protection. The tar-paper-wrapped colonies were intermediate.

The average estimated percent of all sealed brood or potential bees for the two years (1954-1955 and 1955-1956) indicated that the tar-paper-wrapped colonies were the best and slightly higher than those in the overcoat case and those protected by a north windbreak. Colonies with no protection north of the windbreak were slightly lower in bee production than the lowest of the top-ranking three, while those on summer stands, which were penalized by lost queens during both years and causing consequent reduction of brood rearing, ranked last.

The relative amount of honey produced for the two years was highest for the colonies in the overcoat case with the tar-paper-wrapped colonies next. Colonies protected by a north windbreak ranked next, followed by those with the north exposure and summer stands. In the latter case the lower number of bees present at the time of the nectarflow due to the loss of queens and consequent reduction in bees was a contributing factor to the low production.

On the basis of loss of weight during winter, it is concluded that among the protective materials used, winter protection in the area of Manhattan, Kansas, is best attained by use of tar-paper wrap and that overwintering without any protective insulation or covering is better than the two-layer overcoat case as used in these studies. On the basis of relative increase in weight of bees and sealed brood during early spring, no protec-



Winter colonies south of a windbreak.

Colonies in a two-layered overcoat type of packing, the poorest plan under Kansas conditions.

tive covering is better than tar paper, and distinctly superior to the two-layer overcoat case.

Commercial apiaries of one hundred or more colonies can be operated without extra bulky wintering equipment. Permanent apiary sites should be, as far as possible, selected with a southern slope and natural winter protection of a windbreak on the north side of the apiary. The most satisfactory management without extra expenditure for materials and the labor of manipulation of extra equipment is to overwinter colonies in a well-protected location with colonies managed to be composed of large bee populations with adequate stores of honey and pollen to supply the needs until the first major nectarflow.

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AUGUST REPORT OF SECRETARY-TREASURER HONEY INDUSTRY COUNCIL OF AMERICA

FROM APRIL 30, 1958 THROUGH JULY 31, 1958 REVOLVING FUND

BALANCE — Peoples National Bank April 30, 1958		$2,030.29
Receipts:		
Sale of Stamps	$ 605.00	605.00
TOTAL RECEIPTS — Peoples National Bank		$2,635.29
Disbursements:		
Bee Research Association, Ltd.	$ 150.00	
University of Wisconsin	1,500.00	1,650.00
BALANCE — Peoples National Bank July 31, 1958		$ 985.29
SAVINGS ACCOUNT — Peoples National Bank	$3,077.97	
Interest through June 30, 1958	46.15	
	$3,124.12	$3,124.12
TOTAL BALANCE July 31, 1958		$4,109.41

L. H. LITTLE, Secretary-Treasurer

No New Participants In Check Off-Plan Since April 30, 1958

Superior Honey in Australia

Ralph Smith, of Superior Honey Co., returned sometime ago from a two months' trip to Australia where he helped set up a honey handling and manufacturing plant at Sydney which is likely now in operation. Australia is encouraging new capital ventures and business conditions are bright in both Australia and New Zealand. The outlook for honey production has been increased with the completion of the $1,250,000,000 Snowy Mountain project between Melbourne and New Zealand, about 150 miles from the coast, that will furnish water for about 2,000 square miles of previously arid land.

Glen Perrins
Ogden, Utah

EDITORIAL

Orderly Marketing

It is perhaps too early, even at this date, to determine what the honey crop is for 1958. The reports we get run both ways—poor and good. Where the crop is good it is likely to be above last year. The quality is unusually fine. All this indicates a crop equal to last year; possibly above. Therefore let's plan an orderly marketing program. Help yourself with the check-off plan and instruct your buyer, if you sell in bulk, to deduct a cent for each sixty pound can of honey from your payment which he will match on his part. If enough can be set aside for honey promotion this way the market will continue to be an orderly process. Also, the present support price for honey is 9.6 cents per pound, based on Grade C or better, in sixty pound or larger containers. Don't sell for less. Now good table honey should bring 12c or more. You can put your honey under the Government Loan Program until you are able to get a fair price. See your local Agricultural Stabilization office at your county seat. If you are interested in the check-off plan get details from the Secretary Treasurer of the Honey Industry Council, Leslie Little, Shelbyville, Tennessee. Above all, don't get rid of your honey at a low price. We must market wisely and resolutely. The per capita consumption has declined from 1.8 pounds to 1.2 pounds. Follow the Buss Reports that begin on page 351. SELL HONEY RIGHT.

MEETINGS

HERE and THERE

American Beekeepers' Federation To Meet In Tampa, Fla., Jan. 25-31, 1959

Tampa News Bureau picture of Tampa sky line; second largest city in Florida with a population of more than 250,000. Tampa University in foreground.

The annual meeting of the American Beekeepers' Federation will be held in Tampa, Florida, beginning January 25 and running through January 31. In connection with the Beekeepers' Federation, the Apiary Inspectors of America will hold their annual meeting, also the Southern Conference will hold their annual meeting on the 26 and 27. The Hillsborough Hotel in downtown Tampa will be headquarters for these combined meetings.

Following this meeting, Tampa, the only city in the world to be captured each year by pirates, is girding for battle against the buccaneers of Ye Mystic Krewe of Gasparilla, held in connection with the Florida State Fair, opening on Tuesday, February 3.

Following the beekeeping meetings, and in connection with the Gasparilla celebration and the State Fair, the National Honey Show will be held. Those preparing to enter their honey in this great show should contact Fred V. Oren, Superintendent, National Honey Show, 2516 Silver Lake, Tampa, Florida.

The program committee for these various groups is now working out an interesting and worth-while program.

Reservations for attendance at these combined meetings and the Honey Show can be made by contacting the Hillsborough Hotel, Tampa, Florida.

H. S. Foster, Chairman
P. O. Box 712
Auburndale, Florida

Middlesex County (Mass.), Winchester

The last summer meeting of the Middlesex County Association will be at the home of Dr. and Mrs. Herbert Anderson, 184 Ridge St., Winchester. Dr. Anderson promotes the use of honey. At this meeting some lucky member will become the owner of the club hive.

Lolita Pamplin
Corres. Sec.

Norfolk County (Mass.) Norwood, Sept. 7th

The August meeting was cancelled in order to make it possible for the members to attend the Fourth Annual Meeting of the EASTERN APICULTURAL SOCIETY at the University of Massachusetts, Amherst, Mass.

The September meeting of the Norfolk County Association will be held Sept. 7, 2 p.m. at the home of Mr. and Mrs. Oscar Saterdel, 337 Summer Street, Norwood. An interesting and instructive meeting will be held and a corn roast will be enjoyed. Come prepared for a good time.

Edith L. Colpitts
Corres. Sec.

Westchester County (New York) New Rochelle, Sept. 21st

The Westchester County Association will hold their next meeting at the home of Mr. and Mrs. J. A. Bailey, 97 Lockwood Ave., New Rochelle, on Sunday, September 21st, at 2:30 p.m.

At this meeting, plans will be discussed in regard to our "Winter Program." Bee problems will be answered by our expert beekeepers.

Let's all meet at the Bailey's new home and enjoy a social afternoon with your fellow beekeepers. Refreshments will be served.

Mrs. Alfred Roth, Pub.

Illinois State Fair Winners

The first and second place winners at the Illinois State Fair would fill an entire page, not to include other winners. We have two fine pictures but they are here too late to show in this issue so they will have to lay over until October.

Harry E. Dale received the Governor's Trophy for the best booth display and two other firsts. William Wallanches captured the American Bee Journal sweepstakes and seven other firsts. W. J. Ghere received six firsts and Robert Hathaway five firsts.

International Congress, Rome, Sept. 18-23

Sketch of proceedings of the International Congress of Beekeepers to be held in Rome Sept. 18-23 are available by writing to Secretary, Int. Congress of Beekeepers, Corso Vittorio Emanuele, 101, Rome, Italy.

Immediately preceding the Rome meeting will be the scientific meeting of the Congress at Bologna on Sept. 15 to 17.

The Congress will be divided into six separate parts:—

1. Beekeeping and Technology of Bee Products
2. Bee Products
3. Use of Bee Products in Therapy and Medicine (honey, bee poison, royal jelly).
4. Apiculture and Agriculture
5. Control of Bee Diseases
6. Beekeeping Economics, Org. & Legislation

National Honey Week October 27 - November 1

Not too early now to prepare what you will do to take part in National Honey Week. Write American Honey Institute for information about selling helps and for suggestions. The crop this year may need considerable boosting to make a good market at a good price. If you distribute honey in a retail way National Honey Week is your big chance to put a push behind selling.

Midwestern (Missouri), Kansas City, Sept. 14th

The Midwestern Association will meet at 2:30 p.m., Sunday, September 14, at the home of Mr. and Mrs. Walter Hill, 8440 Jarboe, Kansas City. Everyone welcome.

Carroll L. Barrett
Secretary

Sixth Annual Meeting of the Entomological Society of America, Salt Lake City, December 1 - 4

NOTICE TO RESEARCH WORKERS IN THE FIELD OF APICULTURE

The Sixth Annual Meeting of the Entomological Society of America will be held at the Hotel Utah in Salt Lake City, Utah, on December 1, 2, 3, and 4. A paper-reading session of the Apiculture Subsection will be held during this period. In addition, a symposium led by F. E. Todd of the Bee Culture Section, Agricultural Research Service, USDA, on "Methods of Testing the Effects of Insecticides on Honey Bees" is planned as a high spot on the apiculture program.

The program committee wishes to announce that the dead line for receipt of titles and abstracts is September 1. A number of papers contributing to an outstanding program covering as many phases as possible of apiculture is sought by the Apiculture Subsection officers.

Utah is known as the "Beehive State" and the straw skep is displayed prominently throughout the area. Because of the important role of the honey bee in Utah's history and economy, it would be fitting to have this year's meeting of apiculturists one of the best in years. Now is the time to wind up that bit of research and present it at Salt Lake City.

Titles and brief abstracts should be sent as soon as possible to:

Dr. L. D. Anderson, Chairman
Program Committee
Department of Entomology
Citrus Experiment Station
Riverside, California

W. C. Rothenbuhler, Chairman
M. D. Levin, Secretary
Apiculture Subsection

Kansas State, Hillsboro, October 4th

The 57th annual meeting of the Kansas State Association is to be held at Hillsboro, on Saturday, October 4. The feature of the program is "Kansas Honey Houses." Each beekeeper attending is requested to take some pictures, preferably colored slides, of his honey house and/or processing equipment for use at the meeting.

Kansas Free Fair, Topeka, Sept. 6 - 11

Mr. Dale Scheel of Emporia, Kansas, is in charge of the Bees and Honey exhibits and judging at the Kansas Free Fair to be held at Topeka September 6-11. There are three classes for extracted honey, three for comb honey, one for beeswax, and three for bees. Contact either the Kansas Free Fair Association at Topeka or Mr. Dale Scheel at Emporia, for more detailed information. Here is a good place to give Kansas beekeeping a boost and perhaps win a prize too.

Cook-Dupage (Illinois) Brookfield Zoological Park, Sept. 21

The Cook-DuPage Association will hold its meeting, Sunday, September 21, in Brookfield Zoological Park. The park is situated about fourteen miles southwest of the Loop. It is between 31st Street on the north and 34th Street on the south; directly west of the Des Plaines River and east of Salt Creek near Brookfield. The meeting will convene at 1:30 P.M. in the Special Exhibit Building at the east end of the Bird Terrace, in which a bee tree is featured.

One of the topics will cover the effect of poison spraying on bees and other insects and the potential results on plants depending on pollination. A bee film is also on the program. A pot luck supper will be served. Anyone interested in bees or beekeeping is cordially invited to attend.

For further information contact: Mrs. Grace Sedlak, Secretary, Rt. No. 2, Box 461, Oak Lawn, Illinois.

Florida State, Fort Pierce Beach October 23-24

The 38th annual meeting of the Florida State Association will be held on October 23 and 24th, at the Shamrock Village, at Fort Pierce Beach. This meeting will be preceded by the meeting of the American Bee Breeders Association on October 22nd, and we extend a most cordial invitation to all interested persons to attend this meeting. Available accommodations range from single rooms to three bedroom apartments and reservations can be made by writing directly to the Shamrock Village.

F. A. Robinson,
Secretary

EDITORIAL

LOYALTY

It may be said that the least loyalty or consideration any beekeeper can show his friends or fellow beekeepers is to fail to attend meetings of beekeepers associations which are held within their reach. No requirement is made by any of these associations to be a member to permit attendance. Methods of good beekeeping and disease control are discussed at these meetings as well as marketing conditions, in an attempt to be of real helpful service to the beekeeping class. It absolutely costs less to be a member than not to belong. Those who fail to attend should be just as ashamed and feel just as guilty of neglect as would one fisherman who would ignore the cries for help and fail to go to the aid or rescue of another competitive fisherman whose boat may have been capsized.

(From the "Kansas Buzzer.")

From American Honey Institute

SEPTEMBER—AND THE HONEY MARKET

Ringing school bells herald the month of September and also possibilities for you, the honey merchant. Families will be returning from summer vacations, and dad will be returning to work as the beginning of another nine months of industry gets under way. Chances are, mother will be filling several lunch boxes each day, both dad's and the children's; and she will be open to all sorts of different suggestions as to what to pack these lunch boxes with. This is where you can promote your product by putting honey uppermost in her list of ideas for variety in the lunch pail.

"It pays to advertise," may be an old saying, but it is also true; so now is the time to prepare Mrs. Homemaker's table to receive your honey supply.

Are you fortunate enough to have a local radio or TV station in your area with a homemaker's program on it? If you are, send them a honey recipe book and a pound or two of honey, and chances are they will be used on some future program, thus helping to increase the demand for honey in your area.

Don't let the local newspaper take the back seat in your campaign either. Since September is the time when you begin marketing your honey crop, place an unusual, inexpensive ad in the paper such as this one:

BEE-A-HONEY!
and
Stock your larder with
"Natural Health" from
_____Honey Farm.
Pure _____ honey, in
Pints, quarts, and
gallons sizes.

Recipe leaflets may be had at cost from the American Honey Institute to send to schools, 4-H groups and other organizations in your campaign to increase demand in your sales area.

The time is gradually drawing near when the American Honey Institute will be launching its big campaign to promote this fall's crop of honey. It would be good business sense if your sales campaigns would overlap with ours; yours on a local scale, and ours on a more national scale. Our job is the same as yours, to help you to sell your honey!

A treasure on the table, molten gold dripping from sweet muffins, glazed delicate meats and steeped vegetables in amber sweetness, this is honey and this should be honey when Mrs. Homemaker thinks of it. Here is but one recipe which you may make use of to help remind her that this natural sweet has a definite place on her table, in her cooking, and in the family's lunch pail.

BUTTER-HONEY FRIED CHICKEN

1 tender-grown chicken (cut up for frying)
1 cup flour
2 teaspoons salt
¼ teaspoon pepper
2 teaspoons paprika
½ cup butter (¼ of a pound)
Honey-Butter Sauce*

Dip chicken pieces into mixture of flour, salt, pepper and paprika. Melt butter in a shallow baking pan in a hot oven (400°F.). Remove baking pan from oven. As pieces of floured chicken are placed in pan, turn to coat with butter, then bake skin side down in a single layer. Bake in a hot oven (400°F.) for 30 minutes. Turn chicken. Pour *Honey-Butter Sauce over chicken. Bake another 30 minutes, or until tender. Spoon Honey-Butter Sauce over chicken. If chicken cannot be served at once, reduce oven heat and brush chicken again with Honey-Butter Sauce.

*HONEY-BUTTER SAUCE
¼ cup butter melted in a saucepan
Add: ¼ cup honey and
¼ cup lemon juice

The above Butter-Honey Fried Chicken recipe to serve 24 persons may be had by sending a card to the American Honey Institute, 114 North Carroll Street, Madison 3, Wisconsin.

All Around The Bee Yard

by G. H. Cale, Sr.

This alternation between "All Around the Bee Yard," "Questions," and "Recipes" may not suit all readers but it's a better arrangement than it would be to have each of them every month. To give due space to every part of the Journal is no easy matter without increasing pages. Every space allotment is figured on a cost basis. We should break even at least.

*

The season is about over. Flocks of birds are beginning to go south. I expect to see blue birds ganging up one of these days and when that happens I will know that it is time to get all the fall work done with the bees unless I want to get out in the snow to finish. Seasonal changes are wonderful and one never gets to the point where they are understood completely. The only part of the year I heartily dislike is winter. Anyone have room in the car trunk to take me to Florida?

*

This will be a year when it will be hard to determine just what the total honey crop for the country is. One fact does stand out. The color and flavor of honey likely will be above average. In some locations however the water content will be higher than usual because of repeated rains. Yet I have a sample from North Dakota at home with no color, absolutely white; and the marvelous flavor of mixed clovers; so thick it will hardly pour. Talk about contrasts, we have them this year.

*

Just how much should color determine quality? I don't taste color, do you? However, practically everyone who examines a honey sample first notices the color. If it is white it must be good. I know some honey that would grade white that has no flavor; or it has an off flavor. The second measure is taste. If the taste is "wonderful" it is good, so it must be white and it must taste good.

Shucks! The finest honey of the South is amber all the way from dark to real light. That's not all, some of it brings more on the market that the whitest honey in the North. Just because it tastes "wonderful." Some of my favorite honeys from the South are sourwood, orange, gallberry, clethra, and black land cotton. Southern vetch is often water white and heavy bodied but I don't care for its flavor. In the North my favorites are alfalfa, alsike, white Dutch, and wild flower mixture we used to get in northern Minnesota and it is often a light amber.

*

Guess I'll have to write a feature about requeening. GH, Jr. says requeening can be done anytime. That's right. But there are other facts to consider. When shall we requeen "down the row"? Now, that's a sticker. It won't work here in spring. It's too hard in flow with supers on. The best time is when the queens reduce egg laying in fall; or when it gets cold as it does here in late October or early November.

When shall we requeen colonies with poor queens? Anytime, of course, provided the poor queen has not been replaced through supersedure so the colony now has a fine, young, heavy laying queen. Shall we requeen without testing? Often the new queen is not as good as the old one. So it goes. Requeening is not as easy as "anytime" would imply.

*

Remember when we used to "fiddle" with colonies individually? What a multitude of fussy things we did. Now, whether you are a sideliner or a commerical beekeeper of any size, management is rapidly shrinking to doing only what is necessary. What is really necessary varies with the individual beekeeper. Some of management may still consist of "fiddles;" some of it may be so remiss that actual necessities are neglected. I don't know where to draw the line. Often it is determined by the demand for time. If you are so busy with other things in an effort to earn a living, you will examine each thing you have to do with the bees and you won't do what you can get along without. This is especially true in such less important things as the elimination of weeds. No time to cut weeks. Why not use a ground cover like builders felt, or corrugated metal strips, and spray the weeds at the edge?

Equipment too gets badly neglected. Mine does for sure. I keep saying I'll do it but I'm too busy. I've been told that Doctor Miller, one of the world's great comb honey producers and writers, had weedy yards and unpainted equipment. One can go too far in any direction. The day of the "perfect" outfit has gone into limbo with a lot of other things, except for the beekeeper who so loves his bees that most of his time is spent with them on a small scale.

*

It is amazing how different management works out according to location. I have yards about a hundred miles away and some not over ten miles away. About half of the bees are in each place. Management works out by trial and error. Things we do nearby can't be done a hundred miles away. Things done a hundred miles away also may be entirely different from those nearby. If crops would permit I would prefer the nearby places. However good spots for honey production are not easy to find and we soon run out of places. At a distance it is the same. So the reason for two general areas becomes apparent. The good spots for large outfits these days are few and far between.

A "Young" Beekeeper

R. G. Green, Bowling Green, Kentucky, sends a report from the Nashville, Tennessean about Tim Coffman, Hilman community, Overton County, who is 95 years old. He is a well-known beekeeper and has been for many years. Coffman says he never took a dose of prescribed medicine in his life. He lives a very regular life and eats heartily. Goes to bed and gets up at the same hours every day. He is a sturdy oak among the hills. Forty six years ago his face began to smart when he shaved so he laid his razor away and has never used it since. The kids get a bang out of seeing this real-live Santa with the flowing white beard.

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UNDER CURRENT

We are really rolling now. Guess our banter at the beginning of last month's Undercurrent stirred up replies to the subject under discussion. Besides some nice answers for this month's subject, there were left over answers about "The Most Important Advancement in Beekeeping." We will get everyone into print somehow so don't hold back. Try your brain power on the subject for October as given at the bottom of this page.

The subject for this month's discussion:
How Can Women Be Made Conscious of the Need to Use More Honey in the Home?

ANSWERS
Selected by Postal Date

Mrs. David P. Rennie
Norman, Oklahoma

Work on the kiddies!

Strictly between us "Bee-maids" there is more progress to "be-made" with the womenfolks through the children than in any other way.

1) Teachers are begging for someone to come into the schools with an observation hive, hat, veil, tools, etc. Just a short talk on spring's most interesting subject or simply a neat display for her talk and the results will amaze you.

2) Call your local library. They usually show a film each year, or will be happy to do so and will fall over themselves to accept your offer of a live display to go with it.

These youngsters will go home as enthusiastic salesmen and supporters of our honey. That moves honey off the shelves and into the home where it belongs.

Don't forget, the password to success with the young ones is NOT the food value of honey, but rather how good it tastes and in how many different flavors. You might arrange with the teacher in advance for the children to hold a contest, write poems, short stories, draw pictures or something else concerning bees and at the display let the children read or show the best ones, the teacher having previously judged them.

Roy H. Gibbons
Bentley, Ill.

Women can be made conscious of the need for more honey in the home by several means. First beekeepers should go to schools with an observation hive and show the pupils the bees working, and pass out recipes using honey. They will become interested and take the recipes home and thus interest the mothers. Nothing attracts attention more than moving objects.

Also get permission and set up an observation hive in a grocery store. While people are looking at the bees hand out recipes to the women, and suggest the sale of honey to them. Explain the action of the bees, and the uses of honey. Give the storekeeper a percentage of the proceeds of the honey sales. In other words sell your honey through the store and you do the demonstration. This will get lots of people interested in using honey in the home.

Carl Wright
Stanton, Texas

Women need to be educated to the usefulness of honey before they can use it well. They have used it on hot biscuits but how many cook cakes, cookies and other foods kept moist by honey? Honey adds a distinctive flavor to foods that other sweeteners do not have and it is healthful too.

How to let the housewife know this? What has your bee association been doing? Arrange attractive displays in food stores giving information about honey and bees. (Hint: imagine the interest in an observation hive.) Offer free recipes and suggestions on ways to use honey. Then stand by with extra containers of honey.

S. S. Claussen
Byron, Illinois

Do you suppose honey depots would pay, where honey products and beeswax products would be sold? Places with comb and extracted honey, breads, cookies, cakes, candies, figurines from beeswax, small beeswax cakes; ties, pins, pillow cases with honey flower designs. Several beekeepers working together could have a community venture.

H. Span Letiner
Winnsboro, S. C.

Probably one of the hardest jobs known to man is to make a woman conscious of anything, let alone trying to show her why she should use more honey in her home. I am one beekeeper that firmly believes if we spent more time packing prettier containers of honey, only choice table honey, and left all those tons of honey not fit for the table on the bees where it belongs we might get somewhere. The honey displayed in many stores today is ruined because of the grade of the honey. If we left this for the bees and did not use tons of sugar for bee feed we might get somewhere. With proper care in packing, filling each jar as though it were for an exhibit, the housewife would realize that honey really belongs on her table after all.

Additional answers to July discussion: What Do You Consider the Most Important Advancement in Beekeeping the Last Twenty Five years?

Harry T. Starnes
Crawfordsville, Ind.

The most important advancement has been the change in the attitude of beekeepers towards the use of drugs to prevent or cure bee diseases. Formerly, if the honey market was weak, the commercial man would hesitate to feed back honey. Now he can feed it with confidence anytime. He may gain a new crop of choice honey later at a more favorable price. Drugs make commercial expansion possible. They have also made it safe to manage bees in a more routine manner, without trained help, bringing a brand new outlook on apiculture.

Here is a good subject to follow "The Most Important Advancement in Beekeeping" (August), suggested by Mrs. David P. Rennie, Norman, Okla.:
"WHAT DO YOU THINK BEEKEEPING NEEDS MOST NOW?"

Make your answers as short as you can and still state your points clearly. Send your contributions to "UNDERCURRENT," American Bee Journal, Hamilton, Ill. For published answers, subscriptions will be extended one month per type inch. Answers not used immediately will be used as a part of succeeding "Undercurrents." New subjects are welcome. What do you suggest?

How To Do It

Address "How To Do It," American Bee Journal, Hamilton, Illinois.

The number one choice will receive a three year subscription extension; numbers 2, 3, and 4 will receive a full year each; numbers 5, 6, and 7 a six month extension each. Balance two months each.

Sometimes there are more items than can be used in one issue (as for this month). Those left over will be considered the following month.

Number One

A Queen Cell Bank

When the swarming season is at its peak, many superb queen cells are wasted. We dare not leave them in a powerful colony, and yet there are times when it almost breaks one's heart to destroy them. That is why I came up with this brain storm. No matter how well managed the bee yards, occasionally a swarm will be hopelessly queenless. If, in going through your colonies you find some exceptionally fine, ripe cells, exchange a frame of comb for the one with brood, bees and cell, placing it in an empty hive for temporary storage. You may want to accumulate several such emergency requeening frames. Even if you can't use all the cells immediately, you can set the hive in your apiary, and you will still come up with a "nuc," with one laying queen for emergency use at a later date. If you don't save any queen cells, the very last colony you check may be queenless, after you've already burned your bridges behind you. That is exactly what happened to me, before I adopted the above idea.

Thomas Doonan
Des Moines, Iowa

Number Two

How to Reliquefy Chunk Honey

When my chunk honey granulates on the merchant's shelves I make it a cardinal practice to replace jar for jar with fresh honey. Now this turns honey, once sold, back on me. What to do?

Get a large square tub and make a box for it about three inches larger all around and pack it with insulation. On this put a good heating element. Hot bed cable is all right but better lay that on a square sheet of asbestos. Next fit a square piece of hardware cloth on the inside bottom of your tub.

Then lay in the jars bottoms up. Fill with water and switch on the current. Set the thermostat so the water inside will register 125 degrees. Usually six or seven hours are needed to clear up the crystals. When the jars are taken out do not turn them up as the hot comb will come right up to the top. Lay them flat until they are cold. You can salvage ninety percent of them in salable condition.

L. F. Childers
New Franklin, Missouri

Number Three

Which Colony Produced The Swarm?

I believe I have stumbled onto a way to tell which colony produces a swarm. Three times I shook a swarm into an empty hive body, with a queen excluder under the body and another excluder on top. By smoking the bees heavily the workers are forced out through the excluders leaving the queen trapped. The workers return to the parent hive which can be identified easily by the large number of bees fanning at the entrance.

Once I hived a swarm as dusk was approaching and a pint or more of bees collected where the swarm had hung. I smoked them heavily and they returned to the parent hive where they were found fanning at the entrance.

I believe if one would take a small portion of a swarm and release the bees some distance away, many of the bees would go back to the parent hive and it could be discovered by the bees fanning at the entrance.

Alva L. Paugh
Oakland, Maryland

Number Four

Bottom-board Protection

To keep my hive bottoms from rotting and making it easier to load hives for moving and to level up when setting them down, I saw light weight 2 x 4 lumber into 2 x 2 lengths and nail one under each end of a hive bottom. They must be soaked in creosote or Penta wood preserver for a few days. For this I cut one side and one end out of two Prestone cans, gallon size, and solder them together. This pan will hold several 2 x 2's. One will have to notch out a bit on the ⅜th inch side of the bottoms so the 2 x 2 will fit clear across the bottom board. On Lev-L-Drain bottoms one will have to put a filler between the 2 x 2 and the floor of the bottom board to make it fit right at the back.

Paul Wege
Lawton, Oklahoma

Number Five

How to Create A Demand for Honey

A use for honey that will help create widespread demand is to stress its use in sandwiches. Granulated honey is the best for this use because it does not flow. The honey may be spread with peanut butter or used on bread with lettuce and mayonnaise. It may be mixed with butter too. The point is that millions of sandwiches are made each day and honey fits this need perfectly.

E. V. Goff
Blissfield, Mich.

Number Six

A Cut Comb Device

The old saying "If you keep a thing long enough you'll find a use for it" came true for me with spur embedders. I only used them once and decided they did more damage than good. So up in the "what not" box they went.

Last summer I purchased several chunk honey, slotted top bar frames and not having any spreader device for them I had a time getting the foundation in. So up to the "what

not" box I went, hoping to find something I could use as a spreader. The first thing I saw were the spur embedders. I decided to try them. The embedded wheel was too thick for most of the frames so I ground the thickness of the wheel down for about three fourths of the circumference. Beginning at tooth one I started grinding, reducing each succeeding tooth a bit more until I had them down to about a third of their original thickness.

Now when I put the foundation in I have no trouble at all. I place the wheel at the thinnest tooth in the top grove of the topbar and roll it up the slot until the bar is spread enough to admit the foundation. Make sure, when you stop spreading, that the wheel is as close to the middle of the bar as possible. Then turn the frame over and set it upside down across your legs with the handle of the embedder hanging down. Then the foundation will go in evenly. Then pull the embedder out. I also use one cross wire at the bottom to hold the foundation straight so the bees will build more even comb. When removing the honey just heat the wire with your electric embedder and it will pull out easily.

Edgar Cushard
Saxonburg, Pa.

Number Seven

A Way to Liquefy Honey in Sixties

Take a galvanized tub, round or square, and place it in a sunny location. Lay the can of honey on its side in the tub and then place a square of glass over the top of the tub. Changing the position of the can hastens the process. You can pour the partly liquefied honey into jars and put them in the sun wax extractor to finish liquefying.

Charles Handell
East Savannah, Ill.

New French Bee Book

Allin Caillas of France is out with another book, a 240 page paper bound book, well illustrated. Its title is "Les 3 Aliments Miracles." (The three miracle foods). As its title signifies Mr. Caillas is discussing honey, pollen, and royal jelly. Here is treated the composition of these three foods with their uses to humanity.

We were especially impressed with that part having to do with the two latter foods, pollen and royal jelly. While Mr. Caillas is an enthusiast, his points are well taken and well substantiated, and we are inclined to think that as time goes on we shall be surprised at the role these two may take in human ailments along with honey.

Copies may be obtained directly from the author, Mr. Allin Caillas at 40 Boulevard Aristide Briand, at Orleans in France accompanying with a remittance for $3.50.

Chemical Tranquilizer

The U.S. Rubber Company have developed a chemical tranquilizer, called Duraset-20W that increases plant yields by reducing the effects of shock and stress caused by heat spells, cold snaps, prolonged drought, or overfertilization. When used as a spray during blossom time it helps plants and trees retain fruit bloom in the face of poor conditions. Also it doubles the usual number of blooms on some plants. In field tests for example it has increased lima bean yields up to 90 percent; doubled the yield of cherries; increased cotton from 10 to 30 percent. It has also been used successfully on alfalfa, cranberries, pears, soybeans and strawberries.

Duraset is a wettable powder to be mixed with large quantities of water to form a spray. It is absorbed through the leaves and then moves through the plants. Just 24 hours after spraying it is impossible to detect as little as two-tenths of one millionth part of the chemical in the plant.

Correction with Apology to Dr. von Frisch

In March (page 100) Dr. Karl von Frisch discusses the solar compass as the basis of communication in the bee colony. It is a verbatim print of his paper at the Vienna Congress. W. E. Large, Gloucestershire, England, calls attention to an error in this English translation of Dr. von Frisch's paper in the fourth sentence of the eighth paragraph which reads as follows:

"Consequently, the dancer transposes horizontal directions into the vertical plane according to the following code: *tail pointing vertically upwards = objective in the direction* of the sun; tail pointing upward at an angle of 60° to the right of the vertical = objective 60° to the right of the direction of the sun; tail pointing vertically downwards = feeding place in a direction opposite to that of the sun."

If the word "head" is substituted for the word "tail" in this translation the correct meaning of Dr. von Frisch's determination will then be given.

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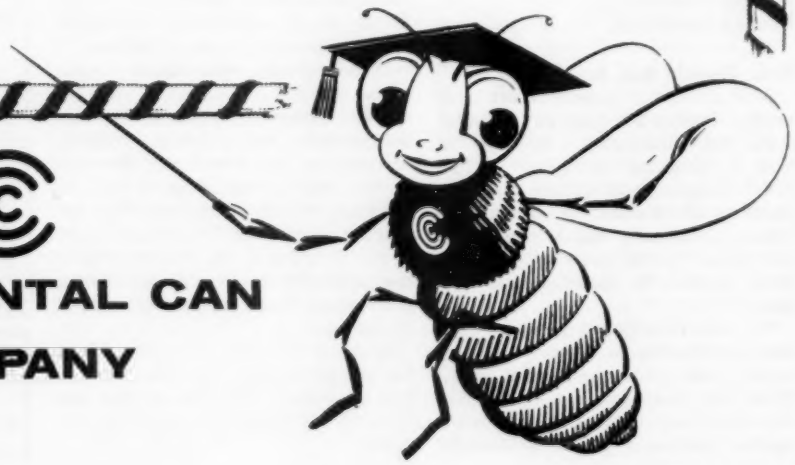

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AUGUST SCRAMBLE

Dr. Clayton L. Farrar

Clayton Leon Farrar, Madison, Wisconsin, is one of the most familiar and productive apicultural scientists we have. He is head of the U.S. Bee Culture Laboratory at the University of Wisconsin. His brother, Milton, branched off into the field of general entomology while Clayton stayed with the bees. Both were brought up in the family bee yards at Abilene, Kansas. He received his degree from the Massachusetts Agricultural College (now the University of Mass.) the same school that G. H. Cale, Senior, graduated from. He became an instructor in beekeeping and entomology at Mass. College, then assistant at the Intermountain Bee Culture Lab., then to Wisconsin. His studies in wintering, colony management, pollen supplies, Nosema and the mechanics of beekeeping have brought us a long way to a more complete knowledge of the fundamentals of beekeeping and honey production.

The Scramble for This Month

This friendly leader in the industry is not only "upside down" but he is also right side up when it comes to beekeeping. He is not only a beekeeper but he is also a-a-ah-well, you finish it. Who is he? Send your answers to "Scramble, American Bee Journal, Hamilton, Illinois." For the best answer, a three year subscription; second, two years; third, one year; others four months each. Answers will be published as far as space allows.

JULY WINNERS

Subject: Henry A. Schaefer

Wisconsin

Number One

Allan Vosburg, Fort Atkinson, Wis.

Henry A. Schaefer, Osseo, Wis. president of American Beekeeping Federation 1954-1955-1956. President Wisconsin State 1952-1953. Served on important committees for both organizations. He recently went to France to study commercial methods there. The Schaefer apiaries are built up to 1600 colonies each summer as a result of good wintering practices, intensive spring management, the use of an abundance of pollen supplement and a method of developing new colonies by division. So he makes a good crop in an area not specified as the best in the state. He has an efficient honey house set up and an enviable supply of equipment.

Henry has kept bees all his life and is interested in the beneficial uses of honey. He would particularly like to see scientific proofs for the health claims for honey. The Schaefer home is in the tiny village of Hale, post office Osseo, phone Pleasantville, express service via Whitehall.

A. Mousty, Neuville, Belgium

Henry Schaefer was born in St. Paul, Minn., June 6, 1896. He is the son of a school teacher, grandson and great grandson of beekeepers. He began with bees with $5.00 given him by his father for bees for orchard pollination. Enlisted for World War I and discharged in 1919 because of nephritis. It required three years for his recovery. He married in 1921 and began beekeeping in Osseo. Has two daughters. He was president and on the executive committee of the Federation. Hobbies, hunting, fishing and photography. Keeps notes to learn which plan or condition leads to the most honey. Uses pollen supplement to get "millions" of bees in April. Uses Demaree plan with two queens. Has 1200 colonies but winters only the best, replacing in spring. He has fought for mandatory price support for honey and for stabilizing the honey market.

Raymond Presnell, Banner Elk, N. C.

Henry Schaefer was born in St. Paul, Minn., June 30th 1896. His father was a school teacher but his grandfather and great grandfather were beekeepers. He was a beekeeper before World War I but he enlisted and served in the conflict from 1917 to 1919, After overcoming a siege of nephritis he began commercial beekeeping just outside Osseo, Wis. Married to Louise Seiler in 1921; two daughters and seven or more grandchildren. Henry has been careful to observe the methods and practices of beekeeping and to use the ones that give him the best results. He has been quite successful with the two queen system. He has about 1000 colonies headed by two queens at least a part of the season. He was on the executive committee of the Federation during the presidency of Glen Gibson and he was president of the Federation for three years. He owes much of his success to his better looking better half, Mrs. Schaefer.

Number Two

Barry Thompson, Jackson, Tenn.

This gentleman is Henry Schaefer of commercial beekeeping fame. He began beekeeping before World War I and has continued to the present. His specialty is the improvement of colony production through streamlined handling and management. His methods were covered in the December ABJ for 1956. He has been on the executive committee of the Federation and was president for three years.

Number Three

Harry Starnes, Crawfordsville, Ind.

This is Henry Schaefer from near Osseo, Wis.; past president of the Federation. He became known as a colony streamliner, with pollen supplement and two-queen colonies. He gasses about a third of the least productive colonies, under the Schaefer plan, so I would call him "Schaefer, the Gasser."

Number Four

W. P. Kinard, Louisville, Miss.

None other than "Bee King" Henry Schaefer, "Colony Streamliner" Osseo, Wis. Henry is one of this country's largest commercial beekeepers. He served as president of the Federation for three years and is one of the industry's greatest leaders.

Congratulations also to—Dr. J. E. Eckert, Davis, Cal.; A. J. Jones, Malden, Mass.; J. G. Pister, Jr., Wapato, Wash.; Mrs. Carl Soder, Stratford, Iowa; Jim Anderson, Wapato, Wash.; Lewton Perry Cofield, N.C.

—The Market Place—

Copy for this department must reach us not later than the tenth of each month preceding date of issue. If intended for classified department it should be so stated when advertisement is sent.

Rate of Classified advertising — 16 cents for each word, letter, figure or initial, including the name and address. Minimum ad, ten words.

As a measure of precaution to our readers we require reference of all new advertisers. To save time, please send the name of your bank and other references with your copy.

Advertisers offering used equipment or bees on comb must guarantee them free from disease or certificate of inspection from authorized inspector. The conditions should be stated to insure that buyer is fully informed.

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JUMBO ITALIAN queens $1.20. Sheppard Apiaries, Aberdeen, North Carolina.

PRODUCTIVE ITALIAN QUEENS: $1.00 each. Ten up 90c. Shirl Baker, Mecosta, Michigan.

PACKAGE BEES, QUEENS, Attractive offers. Write for prices. Crenshaw County Apiaries, Rutledge, Alabama.

CARNIOLAN QUEENS $1.00. Air. Leo Wardell, Route 6, Palestine, Texas.

LIGHT THREE BAND queens, one dollar. Lambert Apiaries, Route 1, Climax, North Carolina.

GOLDEN ITALIAN queens. Good workers and very gentle. $1.25 each. Carolina Bee Farm, Graham, N. C.

FOR SALE

FOR SALE: New Cypress Bee Supplies, 8 or 10 frame hive bodies $1.00, Bottoms $ .50, covers $ .50, Supers $ .50. F.O.B. Homerville, Georgia. Will ship. C. L. Stonecypher, Homerville, Ga.

ROYAL JELLY in capsules (with added vitamins) box of 30 with 25 mg. Royal Jelly $2.00 retails for $4.00. Box of 30 with 50 mg. $3.00 retails for $6.00. Bottle of 100 new pack 50 mg. without vitamins $7.50. Prairie View Honey Co., 12303 Twelfth St., Detroit 6, Michigan.

750 HIVES OF BEES, in Modified Dadant equipment, all in excellent shape, and priced right. George Gessner, Thief River Falls, Minnesota.

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GOOD OUTFIT LOCATED mid-west 850 two story 10-frame colonies disease free. Equipment well painted, good combs. Two deep supers each, excluders, extracting equipment, power loader. Health reason for selling. Wilbur Ellsworth. Tarkio, Missouri.

BEEKEEPING BUSINESS, Bees, modern shop, 2000 supers, excellent location. W. A. Walker, Port Austin, Michigan.

ROYAL JELLY BEAUTY CREAM in ¾ oz. jar $1.25 to beekeepers, retails for $2.50. 1 oz. jar $1.50 to beekeepers retails for $3.00. 2 oz. economy size $2.00 retails for $4.00. Prairie View Honey Co., 12303 Twelfth St., Detroit 6, Michigan.

FOR SALE: Royal Jelly. Royal Jelly Enterprises, 1017 Los Carneros Avenue, Napa, Calif.

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WANTED TO BUY Apiary in Nebraska. Write Box W.W, c/o American Bee Journal, Hamilton, Illinois.

WANTED Good used hive loader. Ancel's Snowberry Apiaries, E. 9207 Broadway, Spokane, Washington.

WANTED—To buy bee outfits and bee equipment in any area. We have buyers for outfits, regardless of size. SIOUX HONEY ASSOCIATION, Supply Dept., Sioux City, Iowa.

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MISCELLANEOUS

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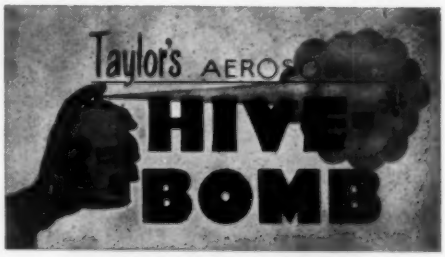

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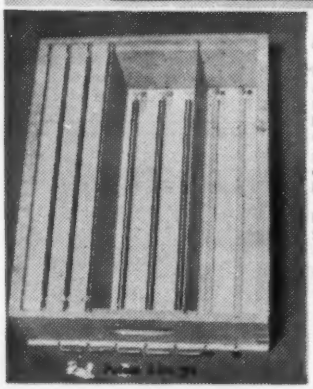

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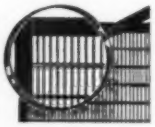

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—Crop and Market—

by M. G. Dadant

CROP COMPARED TO YEAR AGO

Very spotty conditions have prevailed during the 1958 crop year. Even in the same state, conditions have varied greatly in amount of nectar secured. California comes up this year with what might be considered a bumper crop due to ample early rains in the desert and accordingly a fine lot of sage and other honeys which have been a near failure for a number of years. Some report as high as a 150 lb. average from sage alone. This makes up for a short orange crop and much more.

On the whole, more states are reporting less than last year as of Aug. 15. Those apparently on the top side would include New Jersey, W. Virginia, Alabama, Mississippi, Louisiana, Tennessee, Missouri, Oklahoma, South S. Dakota, North Nebraska, North Utah, and California, with perhaps like reports from South Wisconsin and Minnesota. About equal would be Texas, South Colorado, Iowa, Illinois perhaps Michigan, Idaho and Washington.

In the "off" class must be included some potent ranking producers like Georgia and Florida with half a crop, and New York and Pennsylvania which earlier seemed good but owed their near failure to too much rain at the wrong time. The whole New England section is under last year, and in the entire rest of the country come conflicting reports with the bulk on the side of an under 1957 crop.

PROSPECTS

We must admit prospects for the balance of the season, where fall flowers are available, indicate much better chances for a body fill-up and surplus, than a year ago. Hard to see how anything but excessive rains could dampen the bees to the extent that they would not flourish from an extra amount of flourishing weeds.

There does still exist that band of dry in the Canadian provinces and extending down into the northern sections of our own states, and there is still the danger from ill-advised and excessive spraying in the cotton sections. But we look for more honey after Sept. 1 than we had a year ago.

PER COLONY POUNDAGE

Some mighty low per colony figures are reported from the New England States and into New York and Pennsylvania. Ohio and Indiana are disappointing as are Virginia and the Carolinas and we are already familiar with the Florida and Georgia situations starting with the early freezes and dogging the area during the late spring and summer. Colorado and Montana, usually favorable, are much below this year with the exception perhaps of the San Luis Valley and some sections in northeast Colorado and Wyoming, and Utah and Nevada do not boast of their crop. In Canada perhaps Saskatchewan and Alberta and extending into B.C. may equal a year ago. The balance of the Dominion is hurting badly by short yields generally.

HONEY SOLD

Too early for much new honey to be sold. Smaller producers most of whom were out of honey were anxious to get some extracting done and supply their customers. Of course most orange honey has moved and at prices which compared favorably with a year ago. We do not think that Florida or Georgia have cut much if any from last year's jobbing prices, and likely will have to be shopping outside for honey to supply their trade. Bulk comb, especially seems a scarce article, even in the areas of general production of Texas, the Southeast and the Central South. And the bulk producers generally in more northern areas have been and still are worried about getting a finished sealed product for packaging. There have been some sales in bulk of extracted at around 12 cents f.o.b. honey house, and we had one buyer tell us that he could get all the honey he wanted (white) at ten cents. One western buyer has been buying at 11½ cents cans returned, and we understand that the Minnesota group at their Detroit Lakes meeting recommended a price of 12 cents at honey house and not a cent lower. On the whole most of the buyers have enough honey for the present and are waiting for developments.

STORE PRICES

On the whole there has been little change in retail store prices, with a tendency to come up a little to cover increased costs of containers and transportation.

SUMMARY

The big crop in California, South Dakota, North Nebraska, and smattering phenomenal crops in isolated cases in many of the central states tend to make up the partial failures in the Southeast in Canada and the north ring of our own states. Take the California crop out and we no doubt have less honey than a year ago. Keep it in and there should be as much honey as in 1957 and perhaps 5 to 10 percent more owing to possibilities from now on.

The inertia in the jobbing markets no doubt is due to the large and early California crop, calling to mind the way the early California sales used to stagnate the fall honey market. Then, too, there was a carryover of 1957 crop which has tended to put brakes on an orderly condition. This as well as a slow foreign demand has helped make the larger buyers watchfully wait or endeavor to buy at a discount.

We are inclined to think that these influences as well as the apparent indifference of the beekeeper and his organizations to view the situation too calmly have had their early influences on the late summer situation in the honey market. There is nothing like the alarm in 1955 and the alacrity with which all forces, including that of the marketing section of the government, were set for action to assure the movement in an orderly manner of the crop of that year as well as the carryover of the year before.

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You Review This Season and Plan for The Next Crop!

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